Vol. II

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1922.

No. 646.

THE AKRON, CANTON AND YOUNGSTOWN RAILWAY COMPANY, THE ANN ARBOR RAILROAD COMPANY, *ET AL.*, APPELLANTS,

vs.

THE UNITED STATES OF AMERICA, THE INTERSTATE COMMERCE COMMISSION, BOSTON & MAINE RAILROAD COMPANY, *ET AL.*

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED OCTOBER 12, 1922.

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THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent.

VOLUME II.

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686 Washington, D. C.,
Monday, January 24, 1921—10 a. m.

ROBERT C. WRIGHT, called as a witness by the defendants, testified:

Direct examination:

That he is general traffic manager of the Pennsylvania Railroad System, and has been connected with that company nearly 33 years, since March, 1888. Practically all of that time, except the first eight or nine years, he has been in the traffic department. During the period of Federal control he was assistant director of traffic in charge of freight traffic, located at Washington, and he has had the position of Chairman of the Traffic Committee, having in charge the traffic features of this case, so far as they involve the trunk lines. The Pennsylvania Railroad connects with the New Haven Railroad, via Harlem River, through the Pennsylvania's Greenville and the New Haven's Harlem River. Another route by which traffic comes and goes to and from New England from and to the Pennsylvania Railroad is via the Delaware & Hudson and Mechanicsville; and the Pennsylvania has some few rates via Maybrook, but very few via that route.

The Harlem River route is by far the most important. So far as witness can recollect, the first route opened for the move-
687 ment of traffic under joint rates was via the Harlem River, to a limited territory. The New Haven at that time, as witness recollects, embraced the line from Harlem River to Springfield, with some branches, and had connections to Boston over the New York & New Haven Road via Hartford; and that territory in New England was connected up with the territory of the Pennsylvania Road from Jersey City to Washington. They were the Philadelphia group, the Baltimore group, and the Washington group, and prorating arrangements were made between those respective groups.

It is witness' impression from the history he has been able to collect that that was not only the first instance of joint rates between the Pennsylvania and the New Haven, but the first instance of joint rates between the trunk lines in New England. That occurred in the early seventies. The divisions that have been established were arranged so that the New Haven road proper took 100 miles, and

they took 200 miles for the line to Boston; 100 miles to the Philadelphia group; 200 miles to the Baltimore group, and 250 miles to the Washington group. Witness mentions it here because, in going over the exhibits, that particular group seems to be less favorable to the New England lines, but witness thinks probably when those divisions were arranged, it was taken into consideration that
688 that was the heavy tonnage district on the Pennsylvania road, and that there were big cities, particularly Philadelphia, which has a tremendous amount of terminal tracks, and that the divisions were accepted as perfectly reasonable at that time in view of the traffic conditions existing then.

That was the beginning of the joint rate structure, and then they expanded west of Philadelphia to the main line.

In addition to the block mileages that were drawn by the two roads, there was an arrangement for floatage allowance for the steamer Maryland, which was put in as a matter of cents per ton, and then on the Washington group, there was a Union Railroad deduction for the Pennsylvania.

The Union Railroad at that time was a railroad owned by the Canton Company of Baltimore, as witness recalls it, and the bonds were guaranteed by the City of Baltimore. It was a toll road, built to develop the land interests of the Canton Company, and to expand Baltimore, and backed by the City, and any traffic passing over it had to pay the toll over that road. It made a connection between Bayview Junction, the old Philadelphia, Wilmington & Baltimore Road, and the beginning of the Baltimore & Potomac Road, just south of Union Station. It was not used in reaching Baltimore, because the line of the Philadelphia, Wilmington & Baltimore
689 ran down through Bayview Junction, down into Baltimore, the present station; but in going to Washington, it came over the old Union Railroad from Bayview Junction to Baltimore and Potomac Junction. The tax being made on the traffic by this outside road, it was very natural that the deduction be made to pay for the tax out of the rate. The Washington proper divisions are the only ones where the Union Railroad appears. This stayed in effect as part of the whole division arrangement. Witness cannot remember having discussed the matter particularly.

After these initial arrangements were made, they took in the territory west of Philadelphia on their main line, forming the Harrisburg group, the Altoona group, the Pittsburgh group, and so forth. But, when they formed those groups, the New England roads began to get their higher mileages. For instance, in the case of the Hartford group, what was called the Hartford group, where they got the 100 miles on Philadelphia, they drew 222 miles; and when they got west of Philadelphia, plus 60 miles for the steamer Maryland, instead of the arbitraries. They adopted the 60-mile allowance instead of the cents per ton. That was the theory, that it was supposed to cover the cost of that service.

Asked whether, in his opinion, that was sufficient to cover the cost of service, the witness said:

690 "That is going to be a matter of settlement, one way or the other. In the arrangement with the New York Connecting Railroad, the amount of compensation to be allowed that line depends upon the cost to the New Haven Road of their floatage service from Greenville to Oak Point or Harlem River, and it depends very largely upon what they state that cost to be, whether this allowance was fair or not. If they prove, in making their allowance to the New York Connecting Road, that their cost is very much less than they are getting from these arbitraries, we believe those arbitraries should be shrunk."

Asked whether any representations had been made to him in this connection, about the amount of the cost, the witness said:

"I would not want to accept any of the figures that have been mentioned, Mr. Bikle. There were some tentative figures, but they were so low that we felt there must be some mistake. But they were considerably lower than the result from these terminals."

They were lower than the allowances now in effect.

On the lines east of Pittsburgh and Buffalo, the Pennsylvania Railroad has some 52 prorating groups. The shorter the groups, the less extra mileage you draw for each of the points in the groups.

691 The movement to Philadelphia is over the most expensive division of the Pennsylvania Railroad. Its New Jersey division is the highest in operating cost, per ton per mile of any division of its system, and its line from Philadelphia to Baltimore is one of the highest.

Philadelphia is one of the most complicated terminals, that is to say, the most spread out, that witness knows of. There are 400 miles of terminal tracks in Philadelphia forming the Philadelphia terminal, and a great number of stations, 36 stations on witness' line.

Witness has examined the various statements of the complainant companies' witnesses, with a view to considering the conclusions that he thinks are proper as to the reasonableness of those divisions.

In the first place, witness started to make up some statements himself, but came to the conclusion that the statements put in by the New England roads were not prejudicial in any way. However, he would not use the word "typical" in describing them. He does not believe any separate division is typical of a divisional arrangement. The divisional arrangement must be taken as a whole. He thinks the exhibits of the New England roads are fairly illustrative. They are not put in to give advantage to one side or the other. He is perfectly willing to deal with those exhibits as they were put in.

692 Witness can see only one way to test the belief that they all have, that these divisions are more than favorable to the New England lines. He says "belief we all have." He does not know any traffic man west of the New England junctions who would not tell you that he had always been taken advantage of by New England per cents. But, in testing the basis of that belief, the only way witness saw was to try other methods of division; so that he directed his effort and study along that line. For instance, he

took the exhibits of the Boston & Maine, the New Haven and the Maine Central, so far as they dealt with routes to their road. He made up some exhibits of the comparison of the revenue to New England carriers, as shown in these exhibits, with what that revenue would be on a 50-mile block basis, with a 50-mile terminal. He has some exhibits showing the revenue to the New England carriers. These exhibits were received in evidence and marked Defendants' Exhibit No. 70, Witness Wright.

Asked to explain a little more the thought that was in his mind in making this exhibit, the witness said:

"As stated, I simply took the amount of the revenue out of the rate accruing to the New England carriers east of Greenville Junction, as shown on their statements, and then I tested it out on the basis of 50-mile blocks, with the 50-mile terminal, and then also
693 made a list of 50-mile blocks and 50-mile terminals, with the deductions for the steamer Maryland. In the great majority of cases it shows that the New England lines get a better revenue under the present per cents than they would under either one of those bases."

Asked what he could say of the other points in the Exhibits filed by Mr. Eaton, Mr. Wood and Mr. Hobbs from points on their line to points on his line witness said: "I think we pretty well cover the points in ours." He thinks these are illustrative. He is perfectly willing to work those out further; but he thinks they will all show the same result.

Asked what is the thought in his mind in using this basis that he has suggested, of block prorates, the witness said:

"Simply to take some recognized standard form of dividing as a measure of the present divisions. It is said that there are three methods of dividing rates, at different times. One is on a mileage basis, a straight mileage basis. The second is the block basis, with the terminal allowances, and, while it is not generally used, a third one, a fair test, might be a rate prorate. So far as the mileage goes, I did not use it to any extent in this case because the variation in routes made a variation in mileage. But the mileage will show very much the same result, favorable to the New England roads. As to the rate prorate, I notice, from the exhibits put in by the New England lines, that the New England roads receive a better percentage of their Anderson scale than the Trunk lines did of their present class rate."

694 Witness does not mean in each individual instance. He wants to make it clear that in considering the question of rate divisions, you cannot take individual instances. No individual instance is typical. It must be taken as a whole. Taking it as a whole, they get a better share of their Anderson scale than the trunk lines do of their class rates. In that connection, however, it must be remembered that the Anderson scale is higher than what they hope to have, while trunk line class rates are not what they hope to have,

because they hope, in trunk line territory, to establish a definite scale of class rates more in line with the decisions of the Commission in other territories.

Witness thinks that the comparison ought either to be based on actualities on both sides, or on hopes on both sides. Even as it is, it shows an advantage to the New England carriers. That, to witness' mind, is more or less a test of the rate prorate. This exhibit shows a test of a 50-mile block basis, and witness knows that the mileage will show even better for the trunk lines.

In saying "taken as a whole," witness in this particular case means between the New England carriers & all other carriers, but he would also mean it as between the New Haven and the Pennsylvania, or as between the New England carriers and all other carriers, on all traffic. When you are talking about the basis of divisions, if
695 you are talking about a fair basis between the Pennsylvania and New Haven, he would say it would be the result of the whole rate division on all traffic, and not between any two or three points. Nearly all the Pennsylvania's arrangements with other trunk lines or divisions are on a block basis.

It is in effect with the Baltimore & Ohio, the Philadelphia & Reading, the Erie, and the Lehigh Valley. Witness thinks the New York Central is about the only one where it is not in effect, as a result of old arrangements. The theory of the block deduction is that there should be some recognition of the terminal expense. That division would be, of course, for both the terminal roads. Each road that performs a terminal would get the 50-mile block. It is witness' belief from the study that he has made that an extension of this test to the other points of origin and destination shown on the exhibits filed would, by and large, disclose the same result. Witness simply took the important traffic points, furnished by the New England carriers, at the request of counsel, and worked out the actual miles to those points, and showed the prorating miles. That has been prepared in the shape of an exhibit.

The paper referred to was received and marked in evidence Defendants' Exhibit No. 71, Witness Wright.

The last page of this exhibit explains the grouping of the
696 prorating mileages, because points in New England take different group prorating from different points on witness' system. The points that are listed here are the points that the New England lines themselves have furnished as their important points of origin and destination.

Group A is the important part of witness' system west of Philadelphia. It is the most favorable to the New England lines. Witness has not totaled these columns on the exhibit, but just as a matter of interest to himself afterwards, he totaled the actual miles to the New Haven points, as compared with the miles they draw from witness' territory west of Philadelphia, and it shows—whether it is accurate or not, of course, would depend upon the volume of tonnage to each point—that their actual miles amount to 7,640, and the prorating miles 14,646, or very nearly twice as much.

Witness has not included in this exhibit the comparison of the prorating mileage with the actual mileage west of the gateways, because of his belief that the mileage to the points west of the junction is not very much in excess of their actual miles to the important points. That is because the groups were largely made on the important points. For instance, Philadelphia is the big point on the Philadelphia group, and Baltimore is the big point on the Baltimore group. Harrisburg, Altoona, Pittsburgh, and so forth,
697 are largely the big points. Witness could do that, but he thinks it would not show any great excess of mileage. The excesses of mileage allowed in connection with those groups over the actual mileage are very small.

Asked to illustrate that by a few instances, the witness said:

"Harrisburg draws for 204 miles, and that is about the distance, considering Philadelphia as 100. Philadelphia is always considered as 100, because the City of Philadelphia takes in more than 10 miles, and the 90 miles, passenger train miles, plus 10 miles for the ramifications of the city makes 100 miles, 104 miles from Philadelphia to Harrisburg. That is practically the actual distance. In the case of Pittsburgh there is a little excess. We draw for 452 miles, while the actual distance is 431. In the case of Baltimore, the actual distance is 196, and we draw for 200. There are not very great differences."

Asked with respect to the divisions to the Boston & Maine as compared with the divisions to the New Haven, what he can say about the size of the groups as illustrated by their own exhibits, the witness said:

"The important groups from our lines, as I recall it, are their large groups, so that in drawing for their groups, nearby points get the large mileage."

698 Witness means the nearby points in New England. There is one point about the Boston & Maine, which witness might state, because it shows up in some of these exhibits, and that is that their mileage from Boston via Northampton to Harlem River is, of course, in excess of the New Haven mileage, but they have taken the same prorating mileage in competition with the direct New Haven route. That should be remembered in showing the divisions with the Boston & Maine to Boston.

Witness thinks that can be called the customary procedure in the matter of fixing divisions. The comments witness has made apply to the New Haven, the Boston & Maine, and the Maine Central.

Asked what he could say of the Central Vermont and the Rutland, witness said:

"We have not a very great volume of traffic to those roads, and I did not make any special study of them, but I think it can be properly assumed that what is true of the three larger New England roads would be also true of those systems."

Asked to explain the basis for the structure of rates from New England to Central Freight Association territory, as contrasted with that from Trunk Line to Central Freight Association territory,
699 and the structure of rates in the reverse direction, the witness said:

"The rates from New England, the Boston basis rates westbound to territory west of the Trunk Line termini—67 per cent. points—are on the New York basis. Eastbound they are subject to differentials of 7 to 2 above New York from the Central Freight Association territory, and differentials of 5 down from the Trunk Line termini."

Asked what bearing, in his mind, the structure of rates westbound have on the question of divisions, from the traffic point of view, as to what is a proper and reasonable division, the witness said:

"In my judgment, when the New England lines desired to establish the flat New York basis of rates westbound, which meant that their industries should be on an even basis of competition with the western territory, with the industries situated in New York rate territory, the western connections could have promptly demanded that they accept a very low proportion of the rate."

Asked why, the witness said:

"Simply because the trunk lines in that area were helping the New England territory, as compared to their own industries, and receiving that much less revenue from it. In other words, their revenue on such traffic was depleted to the extent that the New Eng-
700 land lines shared in the rate. I do not know all about the history at the time, but I think it is safe to say that if the demands being made today had been made then, the New York basis of rates might never have been established."

Asked whether that rate basis involves the establishment of the same rate for a longer distance, from Boston and nearby points, the witness said:

"Via our road—we are the short line from New York to Chicago—of course, Boston is 207 miles further, so that you are taking the rate which is applied from New York to Chicago and spreading it over 207 miles more, which, of course, reduces the rate per ton per mile and thins the rate out for everybody."

Asked whether, from the rate-making viewpoint, when a rate is thinned out like that, there is any justice in one line insisting that its share should be a certain amount, regardless of the general level of the rates, the witness said:

"No. I think we have made a mistake in a great many cases in trying to separate a through rate into different railroads, because the through rate must be considered for the through distance, and there seems no good reason why any line should receive a greater part of it than any other, under ordinary conditions."

Witness thinks it is evident that the rate structure was
701 primarily in the interest of New England, to enable the New England manufacturers to have an effective basis of rates to the west.

The differential basis on eastbound rates was established before witness' recollection. He is not sure of the date.

To witness' knowledge that basis has been in effect since before the 5 per cent increase, the 15 per cent increase, General Order 28, and the Ex Parte 74 increase; all of which taken together aggregate something more than 100 per cent. The differential is unchanged at the present time. They are now undertaking to docket for consideration an advance in that differential. If the differential had been advanced comparable with the through rate from New York, it would represent a differential of something more than 14 cents to 4 cents.

The New England lines, naturally, and the New England shippers, are primarily interested in maintaining it at its present figure. Witness would say that it is because of that combined interest that their rate is kept at this lower ton-mile figure. Because of that, there is that much less to divide.

Referred to testimony given by the complainants with a view to contending that their costs are greater per unit of service than in the other territories, and asked what effect, in his judgment,
702 should that have on the basis of a rate that is comparable with the other rates, if there is that cost, the witness said:

"The measure of that effect, I think, should be measured by its local rate basis. Any factors of cost should, of course, be recognized in establishing the local rates, and I think were recognized in the Anderson scale decision."

Costs should not be reflected in divisions in any case more than it is reflected in the rate.

Asked whether he had made a study of the station situation in New England, the witness said:

"I did make a study of that, because my attention was arrested, probably by their set of figures. I undertook to test the Pennsylvania lines east of Buffalo—Pittsburgh and east—in the matter of agency stations, as compared with the New England lines. I have an exhibit worked up, showing that on the Pennsylvania lines east, 38.23 per cent of the stations are agency stations. On the New Haven road, 93.52 per cent are agency stations. On the New England roads some 75.27 per cent are agency stations. Figuring that out on averages, the Pennsylvania Railroad has a station every 2.2 miles; New England, every 3.1 miles; New Haven, every 3 miles. The Pennsylvania Railroad has an agency station every 5.8 miles; New England, every 4.1 miles; and New Haven, every 3.3 miles."

Naturally the difference between agency & non-agency stations has a material influence on cost of terminal service.

703 Asked to state the general basis for the division of rates on southern traffic, that is, into and out of New England, the witness said:

"With the exception of perishable traffic, which moves on prorated joint rates—and only that class of traffic, as I recall it—the rates between New England and the South are divided at the gateways by the lines north of the gateways securing certain specifics, certain fixed rates, which are known as specifics, the southern lines taking the balance. Those specifics are what are divided between the trunk lines and the New England lines."

The interests of the trunk lines would be affected by any divisions north of the gateway. In other words, it would come out of their pocket, and would not be reflected in the Southern rates at all, under the present method of dividing.

In making comparisons for the purpose of considering the fairness of the existing basis, testing the New England division, against the trunk line, the comparison should be made on the specific. If the Commission should find that any alteration of divisions in these through rates to and from the South was required by the testimony, it would be manifestly unfair to take it all out of the trunk lines. Some rearrangement would have to be made of the specifics so as to secure participation of the Southern lines.

704 Asked whether in connection with that traffic to and from the South, there is any link of the movement which in any way resembles a link of the movement between Trunk Line and New England territory, the witness said:

"I do not know whether you are referring to the floatage at Norfolk. I was going to mention that incidentally. In any of these bases of divisions, the result is made up of a whole lot of factors. You could not mention them all in detail. It is worth noticing that for our 26 mile float at Norfolk, we do not draw any additional miles, as the New Haven does for its 11-mile float at New York."

The Pennsylvania rail line ends at Cape Charles, on the Delaware—Maryland peninsula, and there the cars are placed on barges and floated over to Port Norfolk and Norfolk for Norfolk delivery or connection with the Southern roads. That floatage service is about 20 miles long. There is a very heavy interchange of traffic via that route. There is no special mileage or other allowance made on account of that.

If any adjustment of the divisions of the transcontinental rates were regarded as necessary, it would be equally unfair to take out of the Eastern territory roads the additional amount out of their Chicago proportion, or permit the New England lines to share with the trunk lines in the proportion east of Chicago.

705 Speaking of per diem, purely from the traffic point of view, as a factor having to do, if it has to do, with the division of rates, witness has rather violent views on the subject, he is afraid. He would not like to admit that the failure of a road to provide itself with equipment was a basis for a higher division of rates. He thinks that would be rewarding them for failure to take care of their proper share of the equipment. In witness' experience

he does not know of any instance in which that has been utilized as a basis, in actual practice, for divisions.

Considering Mr. Eaton's proposal of an arbitrary after prorating, the witness cannot say any more than Mr. Eaton did. It does not work out. He thinks that the translation of those arbitraries after prorating, into arbitraries before prorating, would have the same effect. It would, in a great many cases, deplete the trunk line revenue entirely, or to a ridiculous extent. Witness does not think it would be a practical way of working it out. That is because it would take such a large amount, to be deducted before prorating, in order to give the New England lines, as their share under the prorating arrangements, enough to bring about the result they ask.

Asked concerning Mr. Hobbs' suggestion that they take 15 per cent from the lines west, the witness said:

706 "I do not think that is a suggestion. That is a hold-up. I do not think that has anything to do with dividing the rates. That is just simply a way of forcing the translation of a certain amount of money from our pockets to theirs. It has no bearing at all on the division of rates. That is just a method of lifting the money."

Road-to-road percents are very dangerous unless junctions are recognized. That is because the junction frequently has a very great influence in the division of the rate. Probably witness can illustrate that better by giving an example outside of New England. The Pennsylvania, with the New York Central, has two junctions on the north and southbound traffic that are very prominent, Canadaigua, at the end of their central division, and Newberry, about half way down: Naturally, the New York Central, on business to the Pennsylvania, tries to carry it to Newberry, to get the long haul and the higher division. If they made road-to-road percents without regard to junctions, just simply the rate as a whole, the New York Central would be very glad to give business up at Canandaigua and get rid of the haul, because they would get just as much money. It changes the attitude of the roads, and would incite roads to short haul themselves the minute these divisions were once fixed. For instance, in New England, witness assumes,

707 the New Haven road would want to give all of its business to the Boston & Albany, if it did not affect its earnings by doing so.

The method would not work out, unless each division was taken and the matter was decided every few months, to see that there was no change in traffic. It is too hard and fast. It does not reflect the character and movement of the traffic sufficiently to be in any way accurate.

Witness does not think it would work very well between lines that were not very closely united in their interests.

Asked concerning Mr. Campbell's proposal of so-called graded percents, the witness said:

"So far as I am concerned, Mr. Campbell did not get far enough to give me a very good idea of how it was going to work."

He did not name his percents. Witness could not see exactly how that would work out. It is hard to criticize it without knowing more about it.

During witness' traffic experience he has been in more or less constant contact with the New England roads and with the question of the divisions. They have not had many changes during his time.

Asked, having regard to that experience, having regard to the study he has made in these cases, the study of the New Haven's own presentation of its traffic testimony, and the other testi-
708 mony, and to all the considerations that are now proper to be taken into view, what is his opinion as a traffic man as to the present basis of divisions, the witness said:

"The belief in which I was reared, that the New England lines had always taken advantage of us, seems to be confirmed."

Cross-examination:

Mileage must be the bed rock of any system of divisions. Mileage is just as much a part of the 50-mile block scheme as anything else, but mileage is more or less fundamental, because it represents the amount of service. The amount of service is the bed rock, and that is probably best represented by the mileage haul. That is the atmosphere in which witness has always lived and in which he expects to live.

Witness thinks that when the New Haven line took 100 miles as a basis of divisions to their old New Haven road, which is their line from Harlem River to Springfield, it being considerably more than 100 miles actually to Springfield, it was taken into consideration that a great many of the heavy points were considerably less than 100 miles from Harlem River.

Witness does not think that if actual miles were considered the standard they got the best of the New England lines then. The actual mileage is not the entire test of the fairness, par-
709 ticularly if the groups are so arranged that the big tonnage points come within. If you ever have been engaged in making joint rates, you would find that one of the first things you did was to consider where the tonnage lies, because you were very anxious to get your tonnage points in as big a block as you could. Witness thinks in those days probably they had better traffic men than they had later; but the thing was considered a pretty fair arrangement.

The Union Railroad is owned by the Pennsylvania interests now. The arbitrary deduction is still made. In dividing with the New Haven line their service terminates on the Jersey side. The New Haven takes it from there, including in their service the floatage. The allowance for floatage was established when the rates were made. The steamer Maryland arbitraries were established in the

seventies, and the 60-mile allowance soon after; all of them before witness' connection with the Pennsylvania Railroad. It came to him as a matter of history or tradition. As rate groups were extended, the division structure as between the two lines expanded, but not with those original mileages as the basis. The minute witness' line went west of Philadelphia, they gave New England 222 miles plus 60 miles for their whole line from Harlem River to Boston.

710 The witness has not worked up any schedule for the mileages taken by his road. Witness feels sure that his road did not get much excess because of the greater number of blocks, and because of the fact that the large cities were located at the end of the blocks.

The main part of the Philadelphia division group is the line to Philadelphia, which is, via freight distance, 100 miles. It includes territory in Jersey near Camden and Amboy, part of the old New Jersey division, which goes down as far as Barnegat City, 137 miles. Barnegat City is something like Provincetown. Nothing goes there but sea gulls. There is no freight of any kind.

The Philadelphia group extends west to Chester, 10 or 15 miles, and goes east and north of it. The Baltimore group extends from Trainer, a point just south of Chester, to Baltimore, about 80 miles. Witness thinks there is no New York group for New England business.

On business going to and from the West, with their own connections west, with witness' road, New York rates start in east of Bristol, witness thinks. That must be about 70 miles from New York, roughly; from 70 miles outside of New York into New York. Then they have some New York rate points up on their Belvidere division, about 125 miles. In the northern part of it, it takes the New York basis. It branches off at Trenton, up into Pennsylvania.

711 Witness does not think Pennsylvania division groups, as a whole, are quite as large as the New England groups. He does not know of any group on his line that takes the same distance that the New Haven group from Harlem River to Boston takes. That is a 200-mile or more group. Witness does not have in mind any instance besides the Union Railroad, of the deduction of arbitraries in dividing with the New England lines, where the arbitrary is not added to the rate. There are some instances of arbitrary deductions. There frequently are arbitraries where the rates are made on the addition of arbitraries to some base rate.

Witness thinks, as to the 52 groups east of Pittsburgh, there are some groups or blocks smaller than 50 miles. They are very much in the minority. Most of witness' groups run around 100 miles.

When making the comparison of the present percents with what they would be if they had 50-mile blocks, witness is making a purely theoretical comparison. The 50-mile block basis with the New England roads has never existed; but it is one of the nearest tests they can make.

They have worked out 50-mile blocks both sides of the Hudson, with the 50-mile terminal to represent the terminal service. Of

course, the shorter the distance the road hauls it, the more effect that terminal has on its division.

712 In its practical effect the difference between that division and actual mileage gives no consideraton to the terminal service.

In giving each road, for terminal service, the equivalent of 50 constructive miles, there is this difference: If you only had a 50-mile haul in New England, you would get twice as much, because you perform the terminal, while with the 300-mile haul west, you would only get one-sixth as much. Witness means twice as much out of the rate, twice as much in making your percentage. That would work the same way on the west side of the junction, only where they have a short haul. With the bigger roads, that is an advantage to the road that claims to be the short haul road.

Asked whether he means that as between the two he feels that the lines west have a good deal the longer haul, the witness said:

"I do not think that works out that way, exactly, but whenever you are working with two roads, where one is supposed to be the bigger system, you will find that you gain. If you have ever engaged in these negotiations as to divisions of rates, it really comes down to its being a fair proposition that the terminal service should have some representation in dividing the rate. To my mind it is the fair method of divisions."

713 The Pennsylvania's New Jersey division extends from New York to Philadelphia, and around to Camden, and includes their Hudson River tunnel and the electrification. In speaking of it being the most expensive route, witness includes the New York terminal. But that was the most expensive thing before the passenger terminal existed. Witness is not clear that the cost of the Pennsylvania terminal Tunnel Company comes under that division. It is the most crowded, the most expensive to maintain, and the most elaborate. It has these tremendous yards. They are at a great expense holding stuff for the New England roads at Greenville. There is an accumulation of stuff there all the time. It has the greatest density of traffic, but when you divide the density of traffic into the expense——

The significance of it being the most expensive division on their road is the bearing that any item of cost might have in any case on this question of the division, that if cost is to be taken as a measure of the division, the cost is there. The operating cost per ton mile, as shown in the annual report, is heavier for that division than any other division of the road.

Witness is not enough of an accountant to tell how these things are arrived at. He has to take the annual report. That is good enough for him.

714 In looking at the costs per ton per mile, it shows that the New Jersey division is by far the most expensive division in cost per ton mile.

Asked whether he thinks, in his study of the statements submitted

by the New England traffic man, that their selection of divisions has been fair, the witness said:

"Yes; not prejudicial to either side. It is illustrative, I would say. I feel that it is very difficult, as I said, to call it typical. You cannot take particular points and make much of a criticism of a basis of divisions. You have to take the results of the thing as a whole, and that is what it has been very difficult to do. I agree, as you say, that those points were not taken with the idea of showing the situation favorable to New England."

Referred to the fact that the New England roads established the New York rate as the basis for their westbound business, witness said that where a road wanted the benefit of a low rate basis, it was generally fair to expect it to accept a small proportion, because it was benefiting its territory and everything it received came out of the revenue of the connecting lines. This westbound business originates in New England. There is little business coming in overseas. Looking at it from another viewpoint the roads west are partners with the New England roads on that traffic. Asked whether it would be to the selfish advantage of the trunk lines to have these industries put out of existence in New England with the anticipation that they would develop in trunk line territory, witness replied:

"Not at all. We have given them a great deal more than we thought they deserved, for that very reason."

Asked whether it was necessary in order to keep New England alive and to enable its industries to compete with the central portion of the country where they sell goods in competition with those nearer at hand to maintain some sort of an arrangement such as that which now exists witness replied: "We have never suggested changing the arrangement."

With regard to transcontnental rates witness is satisfied that neither New England nor the trunk lines are getting a fair division of those rates.

Witness does not think that on the Southern business his road is getting about 100 per cent. of its local rate. He cannot remember all the variations. In some territories they are getting near to it, and in some not.

If New England is not getting anywhere near 100 per cent. of its local rates, witness thinks water competition has affected it more than anything else. It did affect the specifics from the gate-
715 ways.

The only way witness sees to change the relations with the Southern roads is to abandon the specific proposition and go into a through porating arrangement, or else change the relative increases in the through rates—that is, take a greater percentage north of the gateway than south.

The Pennsylvania calls the route via Cape Charles its all-rail route. The Norfolk specific and the Richmond specific are parallel. A great amount of the Southern business comes via that route. It is

a direct route. A great deal of the business from southeastern territory comes up that way. It is a very important connection with the southern roads. The Pennsylvania water competitive rates apply via that route only. They only meet the water competition via that route. Its lumber traffic is heavy from the South. They are trying now, with the graces of the Commission, to get rid of that differentiation.

A road has a choice of two policies in regard to per diem. It can either equip itself with enough cars to represent its use of cars, or it can keep its equipment down to a low point and borrow cars when it needs them and get rid of them when it does not need them. Witness dares say it is much more economical for the New England lines to borrow them when they need them and throw them back when they do not need them.

716 When witness talks about a road equipping itself with cars, he does not only mean for the average outbound movement he means to the extent that it is interested in the traffic. The chances are that in a dull time the foreign roads would get your cars back to you.

Witness would say that judging from the per diem, that the New Haven is under-equipped. That is the only way he knows to judge. It uses more cars than it owns.

As a traffic man, witness would never say that because a road had more cars than it owned, he would give it a higher rate. He is not sure that he would give it consideration if the per diem burden was due to factors over which it had not any control, and made a necessary item of its cost of operation. He does not believe that it should be taken into consideration in a division of rates; if some real inequality could be proven there, he thinks it would have to be settled by the per diem rules in some way, and not dragged into a division of the rate.

Witness agrees that it costs New England a great deal more than the lines west for coal, on account of the freight they have to pay. He does not think you can take those details into consideration in a rate division matter. They fluctuate. The New England lines may have bought coal last year at a much higher price than other

717 lines. The reason witness thinks that should not be reflected in the divisions is that no one can tell when there may be a surplus of boats at Hampton Roads, and you can get your freight floated up there for almost nothing. He does not think it is practicable to shade it. Asked whether he thought that divisions should remain fixed from century to century, no matter what other factors are affected, witness replied:

"I would not make that statement—'from century to century'—I do not expect to live that long, but I do not believe you can bring about to any great extent a fluctuating basis of division. If the fluctuation becomes so permanent that it is fixed, I would take it into consideration. I do not think that is proven."

Witness is not prepared to dispute the statement that the New England lines have to pay a per diem of $17,000,000 a year that they

did not have to pay in 1870, or that coal costs them a great deal more to get it there today than it did in 1870, or that other costs have grown disproportionately since 1870. He is not prepared to say that they have grown disproportionately as compared with other trunk lines. Witness is not competent to speak on labor costs. Nothing less than a volcanic eruption or the mature judgment of the Interstate Commerce Commission would disturb his opinion that the New England divisions should be less.

Witness' lines have not progressed very far in trying to get what is belonging to them in their divisions with their southern connections. They have had some committee meetings to discuss the matter. He has heard some one say that if they get their full 40% increase instead of 33⅓%, they would have about $43,000,000 more revenue. He is not familiar with the details.

Asked what justification he thinks exists today for the Union Railroad arbitrary, the witness said:

"I do not see why that should be changed any more than others. When we get to reducing the specifics, we may reduce the Union Railroad arbitrary."

718 The Union Railroad is only used for 8 miles on that trip. It is longer than that. It involves the tunnel which is passed through on the east side of Baltimore. The business to Washington had to move over it in old times, and they had to pay a sort of tax to those people to get their traffic moved over it. For accounting purposes, a charge is made to the Union Railroad. It is a separate company and has to have a toll. Asked whether in his study he had not looked up a good many divisions which were not shown in complainants' exhibit sheets, witness replied:

"No sir. We started in to look up some, but did not follow it out. I could not make any better case for myself than your sheets showed."

Asked whether he could have made "a good deal worse one," the witness replied "No."

Asked whether his study did not disclose a great many divisions which were more favorable to his road than those exhibited by the witnesses for the complainants, he replied:

"No sir. I think the preponderance is still largely in favor of the New England roads." He has not any of those studies. Asked what he did with them, he replied:

"I did not get far enough to worry with them * * * I worked them out to a certain extent and then looked them over, and then we decided we would not go further. We decided to use your work."

Redirect examination:

There was a slight inaccuracy in witness' allusion to the Belvidere Division of his road. It terminates on the east side of the Delaware River, as to all points in New Jersey.

The traffic reaches northeastern Pennsylvania through the medium

of connections with the Lackawanna, Central of New Jersey, Lehigh Valley, and Lehigh and New England; but all witness' lines lies within the State of New Jersey.

Asked to explain a little more clearly as to the character of the arbitraries which were different from terminal deductions, the witness said:

"I was just going to give an illustration. To New Jersey, for instance, the rate was arrived at by adding certain arbitraries
719 to the Philadelphia basis. In other words, they were not arbitraries deducted from the rate. They were arbitraries added for rate-making purposes. We have certain arbitraries on the Delaware Peninsula where a sum is added to the Wilmington rate. In other cases, in establishing the rate, it is arrived at by adding arbitraries to some base point."

Witness line does not get 100 per cent. of its local rate as its share of the specific that applies into New England on southern traffic, by a great deal. They do not get 100 per cent. except along the water, where the rates are depressed. Their share to New England is less than their local rate.

D. T. LAWRENCE, called as a witness by the defendants, testified:

Direct examination:

That he is general freight agent of the Delaware, Lackawanna & Western Railroad.

He started in railroad work at Poughkeepsie, N. Y., in 1890, for the Central New England and Western Railway, which is now part of the Central New England Railroad, controlled by the New York, New Haven & Hartford Railroad. He served with that com-
720 pany in Poughkeepsie, N. Y., and Hartford, Conn., for between 2 and 3 years, and then went to Boston and took service with the National Despatch Fast Freight Line, a fast freight line operating over the Boston & Maine, Central of Vermont and Grand Trunk Railways. He remained with that organization as clerk, solicitor, agent and manager, until 1911, when he became general freight agent of the Central Vermont Railway. He stayed there until late in 1915, when he came to New York as a member of the Official Classification Committee, and on March 1, 1920, he left the Official Classification Committee to accept his present position.

The Delaware, Lackawanna & Western has two routes in common use. One is through the Lehigh & Hudson River Railroad, with which they connect at Port Morris, N. J., and which handles the traffic to or from Maybrook, N. Y., at which point connection is made with the Central New England Railroad. Then they interchange with the Boston & Maine Railroad and the Central Vermont and Rutland Railroad through the Delaware & Hudson, their junction being at Binghamton, N. Y., with the Delaware & Hudson.

The other lines interchanging with the New England lines

through Maybrook are the Central Railroad of New Jersey; the Erie interchanges its traffic with the New Haven Road through Campbell Hall, N. Y., and the New York, Ontario & Western also connects with the Central New England at Campbell Hall.

721 Campbell Hall is the terminal of the Central New England, a couple of miles west of Maybrook. The Campbell Hall gateway is practically identical with the Maybrook gateway. This gateway is one of the principal gateways into and out of New England.

The first comprehensive arrangement for divisions between the Lackawanna and the New Haven was arranged via Hoboken and Harlem River in the year 1902. That arrangement was very similar to the arrangement which the New Haven previously had with the other lines reaching Harlem River.

The chief difference between that arrangement and the one in effect with the Pennsylvania Railroad was that there was no deduction in connection with the Lackawanna arrangement of any arbitrary for the service of the steamer Maryland. In all cases that was expressed in a constructive mileage; the distance allowed for that service being 40 miles to and from the first group of the Lackawanna, extending approximately 100 miles west of Hoboken and 60 miles to and from the other groups of the Lackawanna.

The Erie arrangement via Maybrook with the New Haven was put through before the Lackawanna.

Asked to proceed, the witness said:

"In 1905, at the earnest request of the New York, New Haven & Hartford Railroad, the interchange was taken from the Harlem River-Hoboken gateway and the route through Port Morris and Maybrook established.

722 "Right now I want to explain, if anybody worries about it, that Port Morris cannot be found as a station on the Lehigh & Hudson River Railroad. The rail connection is at Andover, N. J., a short distance north of Port Morris, where there are no facilities for interchange, and the Lehigh & Hudson River runs the trains into Port Morris, where we have proper facilities; they using our rails down that far under a proper trackage arrangement.

"The arrangement now is that the lines west of Maybrook, the Lehigh & Hudson River Railroad and the Lackawanna, jointly receive the revenue which was first arranged for the Lackawanna alone via Hoboken. It is approximately 47 miles from Hoboken to Port Morris. It is 58 miles, approximately, from Maybrook to Port Morris. So that as to points west of Port Morris the distance is longer from Maybrook than from Hoboken, and for the two-line haul the same revenue is received that was in the first place arranged for the one-line haul from Hoboken.

"The division groups of the New York, New Haven & Hartford Railroad have been pretty well explained by other witnesses. It has been shown that, generally speaking, their groups are much longer than the distances to the extreme points in the group; and, to be brief, I will summarize the Lackawanna groups as follows:

723 "The average long distance of all the groups—that is, the average distance to the extreme point in the groups—is 186 miles. The average prorating distance for which the Lehigh & Hudson River and the Lackawanna jointly draw is 179 miles—six miles shorter than the average actual haul.

"Now, in connection with the divisions which are made on this basis, there are certain arbitrary deductions. Mr. Wood explained the arbitrary deductions via their Pascoag line, known as the Stillwater group, and via the Wickford Branch. The Lackawanna has arbitrary deductions on its Bangor and Portland Division: that is, the lines formerly belonging to the Bangor & Portland Railway. As a matter of fact, however, these arbitraries are very sorely needed, because the territory all falls in the first group drawing for 100 miles from Maybrook, of which the Lehigh & Hudson River receives 60 miles and the Lackawanna only receives a prorating division on its B. & P. Division of 50 miles, it extreme distance being 60 miles.

"Now, the chief source of traffic, as everybody familiar with the territory knows, is cement. There is a heavy movement of cement to New England. The deduction before prorating is 46 cents per net ton.

"From the Bangor & Portland Division of the Lackawanna road destined to New York, New Haven & Hartford points.

724 "46 cents per net ton. This figures out, taking a short haul—for instance, Danbury, Conn., the first point of importance—75 miles from Maybrook. You can call the Lackawanna haul 50 miles. Now, on Danbury, Conn., the revenue for the Lackawanna, including the 46 cents per net ton terminal deduction, would be $1.25 a ton. The revenue for the Central New England Railroad would be $2.17 a ton.

"Now, I have mentioned the Central New England Railroad while talking about the arrangement with the New York, New Haven & Hartford Railroad, and I will explain that in this way: The New York, New Haven & Hartford Railroad came into possession of the property of the New York & New England Railroad which ran to Fishkill Landing, N. Y., through Danbury, Conn., and Hopewell Junction, N. Y.

"The Dutchess County Railroad ran down to a connection with the New York & New England at Hopewell Junction, and for some time the Central New England Railroad operated from Maybrook to Hopewell Junction, which was the connection with the New Haven. For some reason the New Haven turned the line east of Hopewell, to and including Danbury, over to the Central New England Railroad for operation, and it is now known as part of the Central New England Railroad; but, it formerly having been part of the New Haven Railroad, it is right in the New England division.

725 "Danbury is accorded a division not in consonance with that which was previously arranged for the Central New England Railroad, but with the old arrangement for the New Haven Railroad. I have taken it as the first point of importance on the railroad.

"I might go a little further. Now, from Danbury down to Bridgeport, 105 miles, the Lackawanna there—I want to make a correction. I have given you the figures on Bridgeport, Conn., 105 miles; $1.25 for the Lackawanna and $2.17 for the New Haven. On Danbury, the shorter haul, it is 98 cents for the Lackawanna and $2.68 for the New Haven road.

"Going over into their longer group, the Provincetown route, say Fall River as an illustrative point, deducting 46 cents for the Delaware, Lackawanna & Western makes your total revenue 83 cents and the revenue of the New York, New Haven & Hartford $2.99 a ton; their haul there being 242 miles.

"Now, we have a cement plant at New Village, N. J., which is in this first group, and not on the Bangor and Portland division, where we do not get that arbitrary deduction; and the divisions are as follows:

"On Bridgeport, 105 miles, we get 88 cents, and they get $2.44.

"On Danbury, 75 miles, we get 69 cents a ton, and they
726 get $3.02.

"On Fall River we get 42 cents a ton, and they get $3.36.

"Now, we might next discuss the fast freight line arrangement to and from the New Haven road via Maybrook."

The arrangement via Maybrook, which was formerly in effect via Hoboken, is predicated upon previously existing fast freight line arrangements through Harlem River and Jersey City, and allows the New Haven Railroad the product of certain constructive distances on three groups placed against the mileage allowed the Pennsylvania Railroad from Jersey City to the Central Freight Association centers. That is on a basis of 920 miles to Chicago. That is from Jersey City to Chicago.

The shortest distance witness knows of—the shortest working distance—from Maybrook to Chicago via the Lackawanna Railroad is actually 926 miles. So that they are only accepting there 6 miles less than the actual distance.

However, the Pennsylvania Railroad has a greater advantage in distance over its competitors when you get down into the middle or southern tier of Central Freight Association cities; that is, when you go south from Lake Erie or the line of the Lake Shore Railroad, and at Columbus, Indianapolis, Louisville, St. Louis, and so forth, it will be found that this arrangement for allowing the New Haven road revenue predicated upon its Pennsylvania Railroad ar-
727 rangement is more burdensome upon the Lackawanna or upon any of the roads working through Buffalo.

It would apply also to the Erie working through Salamanca. The Pennsylvania is the short line from all C. F. A. territory when you get to Cleveland or points west thereof, with the exception of points which would route across the peninsula of Ontario.

Now, on westbound traffic the New Haven Railroad does not accept the percentage the derivation of which witness has described, but takes arbitraries in cents per hundred pounds up to Maybrook. Those arbitraries are figured in three groups: First, on traffic des-

tined to stations on the primary connections west of Buffalo—that is, the roads with which we connect direct to Buffalo—the New Haven specifics are figured on basis of their Chicago percentage of the Chicago rate; that is, they get the revenues that they would get if their divisions on Chicago were used.

The second group covers the secondary and tertiary connections west of Buffalo; and how the sepcifics are figured, witness does not know. They are about 6 or 7 per cent less than the specifics in Group 1.

The third set of specifics is merely figured from the others, to provide for the participation of the New York, New Haven and Hartford in the expense of the St. Louis Bridge toll.

728 Witness has not mentioned the grouping or the mileages of the New York, New Haven & Hartford Railroad in connection with this fast freight line arrangement. They are fully displayed on maps which the New England lines have presented; but there is one feature in connection with them which witness wants to call to your attention. In every case the prorating mileage of the New Haven road is materially in excess of the mileage to and from the extreme point in the group. For instance, Provincetown to Maybrook is about 343 miles; 341 miles, witness believes, exactly. The distance which is used in computing their percentages is 393 miles.

Now, they have that advantage in the group mileage. There is another very great advantage which has not been mentioned, and that is where they have a certain group mileage established they do not apply it for the full length of the mileage which they receive. For instance, take the Provincetown group. It includes the very important cities of New Bedford and Fall River and all that productive section.

Now, the Boston distance is 322 miles; the Hartford distance is 282 miles. If they were to apply their shortest group for 282 miles, it would take in every important point in the longer group. That is where the vice is to a great extent, in addition to the feature of the inflated mileage.

729 It would likewise take in every important point in the intermediate group. In other words, every important point on the railroad. 282 miles would take in Boston, Fall River, New Bedford, and every point of importance.

The effect on the New Haven revenue of using arbitraries instead of accepting a percentage, is that the New Haven receives more revenue on the westbound traffic than they would if the eastbound percentages were applied to it.

Asked to proceed, the witness said:

"There is an eastbound fast freight line arrangement through Maybrook to points on the Boston & Maine and Maine Central Railroads through the New Haven road, which was not mentioned by the complainants in their testimony.

"The Boston & Maine and Maine Central territory is divided into groups, under which very much more than actual miles are

allowed east of Maybrook. This is also predicated upon a pre-existing arrangement through Harlem River. These excessive mileages, however, are not applied against the same distances west of Jersey City or Maybrook that are used against the mileages of the New Haven road. For some reason which I cannot explain, the distance of the Pennyslvania Railroad, Chicago to Jersey City, was computed as 940 miles, instead of 920 miles, as in the New Haven arrangement.

"These groups on the Boston & Maine Railroad measure out as follows: The average of the longest actual haul in the group
730 is 366 miles. The average of the shortest actual haul point in the group is 244 miles. The average of the prorating distances used against the 940 miles west, Maybrook to Chicago, is 510 miles.

"Now, it is not 940 miles from Maybrook to Chicago. It is about 926 miles; and the distance which would produce the percentages allowed east of Maybrook is 502 miles, average."

This is against the actual distance to Chicago via the Lackawanna and the Nickel Plate.

Recess till 2 P. M.

D. T. LAWRENCE resumed the stand and testified further:

Direct examination continued:

In addition to the percentages arrived at on the basis described, the Boston & Maine, or the Maine Central Railroad—the terminal road, as the case may be, are allowed a terminal of one cent per 100 pounds. They are settling the eastbound traffic now for a terminal of 2 cents per 100 pounds.

In the Fitchburg group of the Boston & Maine Railroad, eastbound, through Maybrook and the New Haven Road, the City of Boston is included. The allowance there is 373 miles, and
731 the terminal. Boston, on the New Haven Road, through Maybrook, has an allowance of 322 miles, and no terminal.

While another witness will speak generally with respect to the Mechanicsville route, witness wants to make mention of the local arrangement from D., L. & W. stations to the Boston & Maine and its connections via Binghamton, Delaware & Hudson Company, Mechanicsville and the Boston & Maine. In this arrangement is covered the whole territory of the Boston & Maine Railroad and St. Johnsbury and Lake Champlain Railroad, a portion of the Maine Central, which is usually covered by through rates; a small portion of the Rutland Railroad, and the Southern division of the Central Vermont Railway, that is, from Brattleboro, Vt., to New London. The B. & M. groups, so far as distances are concerned, check out as follows: The longest actual haul averages 196 miles. The shortest actual haul averages 119 miles, and the prorating distance averages 251 miles. Now, on the D., L. & W. groups, Buffalo, Syracuse, and Oswego, the Boston & Maine takes 23 miles longer than the mileage

which was used to ascertain the average prorating distance. The distance to Mechanicsville may be said to be 23 miles less than the distance to Rotterdam Junction, and where there is direct competition with the New York Central, it has been the custom of the Boston & Maine to draw, for their prorating distance to their junc-
732 tion with the New York Central, Rotterdam Junction, instead of accepting the 23 miles shorter prorating distance to Mechanicsville, where they actually haul the traffic.

The D., L. & W. Railroad is divided into groups which produce the following averages: Long actual haul, 159 miles; short actual haul, 103 miles; average prorating distance, 187 miles.

That only applies to those D., L. & W. groups which are not absolutely predicated on the B. & M. distance from Rotterdam Junction. On the Syracuse and Oswego groups, the two groups on the line of the old Syracuse, Binghamton and New York Railway, now part of the Lackawanna System running north from Binghamton, the Delaware, Lackawanna & Western receives an arbitrary proportion of 30 per cent. on all groups except the Sherbrook group, where its proportion is 25 per cent.

Now, as to the status of that, witness will say that if you go east on the main line of the Boston & Maine Railroad for 45 miles, the Boston & Maine receives less than the Lackawanna does. It gets 28 per cent. above first, 45 miles. Now, Syracuse, one of the chief points in this group, is about 80 miles from Binghamton, and if you go 80 miles east on the main line of the B. & M., you will find them receiving 39 per cent. on Syracuse business, while the Lackawanna is receiving 30 per cent.

733 Oswego is 114 miles from Binghamton. If you go 114 miles east on the main line, the Fitchburg division of the B. & M., you will find the B. & M. receiving 41 per cent on Oswego. If you turn at Springfield and go either north or south, instead of going straight east from Greenville, 114 miles, you will find the B. & M. receiving 45 per cent, whereas the Lackawanna receives 30 per cent.

When the Boston & Maine receives 41, the Lackawanna receives 30 per cent. In addition to the arrangments which witness has described, the Boston & Maine receives the terminal allowance on all territory except the main line of the Fitchburg division. The percentage for the B. & M. on the Syracuse and Oswego groups, which witness has called out, include this terminal when you turn at Greenville and go either north or south on the Connecticut River, but the percentages which witness has told of on the main line of the Fitchburg are not supplemented by the deduction for that terminal.

Witness offered an exhibit entitled "Corrections to be Made on Eaton's Exhibit of Groupings, Sheet No. 29, New England Distances," which was received in evidence and marked Defendants' Exhibit 72, Witness Lawrence.

The distances which witness used were obtained from the Boston & Maine's issue, showing their mileages between all stations,
734 which is on file with the Interstate Commerce Commission. It indicates, to witness' mind, nothing except extreme haste

and carelessness. The Boston & Maine have made one or two errors which are shown herein, which witness cannot explain; but, generally speaking, the errors are brought about by them using the mileage from the wrong junction. They have Troy, Rotterdam, and Mechanicsville, out in the upper Hudson River section.

The New York Central connects at Troy, the Delaware & Hudson at Mechanicsville, the New York Central at Rotterdam Junction. These are corrections in the actual distances as shown. The percentages, or the division of revenue and the calculations thereof made in Mr. Eaton's exhibit were not predicated on these distances.

So far as reference is made to the rates covered by these particular distances in Mr. Eaton's exhibit, the distances which are marked correct in witness' exhibit should be used rather than the actual distances shown on Mr. Eaton's exhibit.

Going to the other sheets where Mr. Eaton made his calculations as to the revenue east and the revenue west, witness does not find that in general he made the same error that he did in the preliminary sheets, which announce the maximum and minimum lengths of haul.

735 Generally, in comparing the rates per ton mile, and in comparisons with the Anderson scale for similar distances, he used the correct distances. These are the extreme points, and are not generally the points which he used as illustrative; for instance, Boston, St. Johnsbury, and Portland.

Witness has noted some errors in connection with exhibits covering Pacific Coast rates. He calls attention to Mr. Eaton's exhibit with respect to the division of revenue on Pacific Coast traffic. Mr. Eaton gives some illustrations as from Manchester, N. H., and he showed the percentage of revenue accruing to the Boston & Maine Railroad out of the proportion east of Chicago, as 20.6. Witness thinks perhaps the clerk who did this took the divisions to the Manchester group. There is a Manchester group on the Boston & Maine Railroad, which does not include Manchester, N. H. Manchester is in the Concord group. The correct percentage of the east of Chicago proportion for the Boston & Maine Railroad is 26.6 per cent, which will quite materially change the calculations. It will also be found that Lowell has been computed on an erroneous percentage. The Manchester group percentages for the B. & M. is 26.6, and that is what is shown on the exhibit. Manchester is in the Concord group, and the correct percentage is 30.6. That corrects witness' previous testimony in regard to the Manchester situation.

736 The same error was made on Lowell as on Manchester. It is shown 26.6 per cent of the east of Chicago proportion for the B. & M. It should be 30.6 per cent.

Asked to comment upon Mr. Hobbs' testimony with respect to the haul on the Brunswick group, the witness said:

"Mr. Hobbs testified that his percentage proportion on Brunswick group was derived from 117 miles, and he told about the distances, stating that it was 207 miles, I believe from Lime Ridge, Quebec, to Portland, Me., which is quite true. The inference—which I do

not mean to say Mr. Hobbs intended to create—is that for that 117 miles allowance, he would haul traffic 207 miles from Lime Ridge to Portland. That is not correct. There are a number of junctions between the Boston & Maine and the Maine Central in the White Mountain district, up near Mt. Washington, where the traffic from that north country section can be interchanged, and where it is interchanged. Mr. Hobbs' haul is somewhat less than 117 miles, for which he draws the total haul to Mechanicsville or Rotterdam, or Harlem River. It is materially less than it would be via Portland, and the actual distance from Lime Ridge to Rotterdam Junction, say, is about 359 miles, whereas, on the group they draw for 437, and the one cent terminal.

"Mr. Eaton's exhibits covering distances via the Grand Trunk were subject to some criticism. I cannot say that Mr. Eaton
737 was aware of the change that had been made since the divisions were arranged. He showed the mileages of the Boston & Maine and the Central Vermont Railway via White River Junction to St. Johns, Quebec. A certain portion of the traffic always traveled via White River Junction. The main portion of it did. But, there was a section of road to and from which the traffic never has been worked via White River Junction. The route on traffic to and from the St. J. & L. C. Railroad are always through East Swanton, Vt., and the haul is very much shorter than it would have been by White River Junction. In addition to that, these percentages were put on the present basis around the year 1900. In 1905 or 1906, the Grand Trunk Railway acquired the Canada Atlantic Railway, which connects with the Central Railway at Swanton, Vt., and runs up into Canada, crossing the main line of the Grand Trunk Railway at Coteau Junction, Quebec.

"After the acquistion of the Canada Atlantic by the Grand Trunk, the interchange on most of that traffic was transferred from St. Johns, Quebec to Swanton, Vt., and the haul of the New England carriers decreased by about 33 miles, the haul of the Grand Trunk Railway being practically unchanged. Now, I won't say that all of the traffic was diverted to Swanton Junction. The Grand Trunk had a hold-over on grain at Montreal, which resulted in cer-
738 tain of that traffic running via Montreal and down through the old St. Johns route. The Grand Trunk and Central Vermont pooled their power between St. Albans and St. Lambert yard, just south of the river from Montreal, and between St. Albans and Brockville, out on the main line west of Montreal, and there were, at times, cases where there was a surplus of power returning from St. Albans, say, to St. Lambert, and no power to go back to Brockville, in which case they made use of the old St. Johns route; but the bulk of the traffic has for years traveled via Swanton. That was the condition four years ago, when I left that property. There may have been some change since that that I do not know of. I have never heard of it if there has been any."

No change was ever made in the divisions on account of that.

The witness continued:

"Now, I want to call attention also to the mileages on the St. Johnsbury group, as shown on Mr. Eaton's Exhibit Sheet No. 37. The maximum actual mileage haul for the New England lines on the St. Johnsbury group is shown on Sheet 37 as 316 miles. I cannot quite compute the 316 miles, but it must refer either to Swanton or Maquam, Vt., Maquam being the western end of the St. J. & L. C. Railroad, and the longest point ordinarily included in the St.
739 Johnsbury group by any route. That is, it is the most remote from any southern junction of the Boston & Maine Railroad. Now, if that 316 miles refers to Maquam, I would like to have anybody who has this map look at Maquam and find it, in the extreme upper left hand corner.

"To get that 316 miles, follow the St. J. & L. C. Railroad down to St. Johnsbury, Vt. From St. Johnsbury, Vt., down paralleling the Connecticut River to White River Junction; then up the line of the Central Vermont Railway, which is shown as a light uncolored line, through Bethel, Montpelier, Essex Junction, East Swanton, and on up across the Canadian border, St. Johns not being shown on this map, but being about 18 miles across the border. At East Swanton, Vt., this brings the traffic across its own trail, within 2 miles of the point where it started, at Maquam, after having traveled very nearly 300 miles.

"Traffic does not travel that way. It just goes from Maquam by the use of the switching engine from Swanton yard over to Swanton, and is there delivered to the Grand Trunk Railway, and the Central Vermont Railway never sees it. That is the only basis for a maximum haul of 316 miles from St. Johnsbury group. The principal business up there in the St. Johnsbury group, or on the St. J. & L. C. Railroad is granite, from Hardwick, Vt., 61 miles over to
740 Swanton. The New England lines draw for 275 miles, plus 163 miles, or a total of 438 miles, plus the terminal."

The New England haul on that traffic is 61 miles.

Asked whether he had made an examination of the relation of the first class rate to distance, as throwing any light on the figures which have been put in this case by the New England lines, showing their revenue per ton mile on local freight interline from New England, and freight interchanged with the lines outside of New England, the witness said:

"The New Haven Road presented figures for the New Haven and the C. N. E. jointly, considered as one system, showing that for the 11 months ending June, 1919, the freight traffic was divided as follows: Local freight, average distance 60.11 miles; average revenue per ton per mile, 4.375 cents; interline traffic, in New England, average haul for the New Haven—when I say New Haven, I mean the New Haven and the Central New England, jointly, and as one system, 65.32 miles; average revenue per ton mile, 3.122 cents; interchange with lines outside of New England, average distance for the New Haven, 136.29 miles; revenue per ton mile, 1.125 cents.

"I reduced these figures all to a relation to the local traffic which

traveled 60 miles. The revenue per ton mile on the New England interline business was 71.36 per cent. as much as on the local. The
741 revenue per ton mile on the interchange with the lines outside of New England was 25.71 per cent. as great as on the local. Now, I speculated with the Anderson scale, having regard to the relation of rates for varying distances as exhibited in that scale, to find how far the interline in New England and the interchange with lines outside of New England would have had to move to produce the same revenue per ton mile on the total haul as the New Haven's local traffic did, that is, assuming that its haul was the same class of traffic and all moved strictly on the relation of rates for different distances, as exhibited in the Anderson scale. I used for this purpose the revenues derived from the first class rate, because the first class is the key rate, and all other rates are derived by taking a percentage proportion of the first class rate. The first class rate for 60 miles was 41½ cents, yielding a revenue of 13.833 cents per ton mile. 71.36 per cent. of that would be 9.871 cents per ton per mile, which is found to be the revenue for 91 miles. 25.71 per cent. of our first figure would be 3.566 cents per ton mile, which is found to be the revenue that would be yielded by a 444-mile haul.

"Now, deducting the New Haven's 65-mile haul from the 91 miles on the New England, interline, it would leave 26 miles for the New Haven's connecting line in New England. It seems that the New
742 Haven Road, by these figures, was receiving as high a rate per ton mile for 65 miles as the other roads in New England are for 26 miles. I just throw that out for the other New England roads to think over, if they want to.

"Take the 444 miles and deduct the New Haven's 136, and we have left 208 miles for the connecting lines outside of New England. Anybody familiar with the situation, I believe, will feel sure that the average haul outside of New England on all traffic interchanged with the New Haven, exceeds 308 miles. In this average you have to include your trunk line traffic, your traffic from the South, traffic from Western territory, St. Paul, etc., and traffic from C. F. A., and traffic from the Pacific Coast. It must be that the total is materially in excess of 308 miles.

"Now, we know that the rates on this intraterritorial business are not graded according to the Anderson scale, and are not on the measure of the Anderson scale. Now, the question arises, Are they as high as the measure of the Anderson scale? The answer must be that they are not. We know that immediately when you get outside of New England territory, the rates on this interchanged traffic are so low that they prevent the New England lines from getting the full measure of the benefit of the Anderson scale, which was awarded to them, and that the discrepancy runs quite a good many miles out
into Trunk Line territory. It therefore seems that the rate
743 on this traffic is, in accordance with distance, lower than the rate which has yielded these results to the New Haven Road on its local traffic, and also lower than the rate would be if graded on the Anderson scale.

"The question will next arise, Was the traffic of the same nature

on which the New Haven Road earned this 4.375 cents per ton mile locally? I should say not. New England is known to be the home of the small manufacturer producing relatively high grade goods. The New England roads say that they bring all of their raw materials, the low grade goods, in from the outside, and it is known that the New England manufacturers exchange among themselves, and between their own mills, quite a volume of relatively high class, semi-finished goods, the cotton goods for finishing, boot and shoe materials, cotton yarns, scoured wool, and many of those things. It is to be found in the reports of the Interstate Commerce Commission, or computed from them, that about 14 per cent. of traffic originating on the New England roads is less than carload traffic, and about 4 per cent. of traffic originating on the lines of the eastern carriers outside of New England is less than carload traffic. Hence, it must follow that very much of this traffic which produces the result named on local hauls, was of a higher grade than the traffic interchanged between the roads outside of New England and the New Eng-
744 land roads.

"There is another thing I wanted to mention. The loading per car of this traffic handled locally in New England must be materially less than that of the traffic interchanged with connections outside of New England. For the quarter ended June 30th, 1920, the average loading per car on the New Haven Road, as reported by that company to the Interstate Commerce Commission, was 23 tons. The average loading of traffic received by the New Haven Road from its connections was 31 1/5 tons. That, in itself, denotes a lower grade traffic which would naturally take a lower rate. It also shows the reason why there should be quite a disparity in revenue per ton mile.

"Now, did this heavy loading come from connections outside of New England, or did it come from other New England connections? Of course, we all know that the Boston & Maine is probably the biggest connection of the New Haven in New England. There is a great interchange with the Boston & Albany, but that is chiefly the traffic which originates or terminates outside of New England. For the same period, the Boston & Maine traffic originated on its own road averaged 20½ tons per carload, while the traffic received from other carriers by the Boston & Maine averaged 30½ tons. It is quite evi-
dent, therefore, that the traffic which the New Haven Road
745 receives, from its connections outside of New England, is loaded materially heavier than the traffic which it handles locally in New England.

"Every condition goes to show that the ton mile results, as shown by the New England road, are rather in favor of the defendants' case, as to the New Haven's revenue on traffic received from outside of New England or forwarded by it outside of New England. If the traffic were the same kind of traffic, moving the same distance, and the New Haven participated on a mileage prorate, its revenue would be materially less than on its local. The traffic moves further than the distance which would produce the same revenue for the New Haven Road. Hence, it must be getting more than a mileage prorate.

"The traffic is of a much lower class than the traffic which produces the result on local.

"Another reason why the New Haven must be receiving much more per ton mile is that the traffic loads much heavier than the local traffic."

Asked as to his conclusion as to the fairness of the divisions of the New Haven Road and of the New England complainant group, as a whole, as compared with the divisions of their western connections on traffic interchanged between them, the witness said:

746 "The divisions accorded the New England roads are liberal. I think that is a proper word to use."

Asked whether he considers the divisions reasonable to the New England lines and to the New Haven Road, the witness said:

"I think they are more than reasonable, more than they should expect to receive. In fact, I may say that this matter has been the subject of consideration from time to time by the company which I represent. There have been negotiations and correspondence between the two companies running over a period of some years, in an attempt to get a revision of these divisions in favor of the Lackawanna Road. They have never let up, have never been satisfied with it. I am speaking there of the New Haven Road. We have not been satisfied with the others, but the New Haven has appeared to us to be less satisfactory than the others."

Cross-examination:

Asked whether his final conclusion which he has just given is based upon facts to which he has testified, witness replied: "I think I have pretty well covered the facts. * * * From time to time I may have known some little things that I have not told you today. I do not think what they are now." His opinion is based practically exclusively on the facts he has given. It has not been influenced by facts which he has not given.

Witness' point that the divisions on the cement business which the Lackawanna interchanges with the New Haven Railroad, were favorable to New England, is to justify the deduction for the Bangor & Portland Division, to show that it was absolutely necessary to prevent a very much worse state of affairs. Witness selected
747 cement because that is known to be the chief commodity to and from the territory on which the Lackawanna receives these arbitrary deductions. Cement carries quite a low rate. Witness did not look for any other lower rate. He does not know of any lower rate now. Witness picked out cement because it is the commodity which moves in much greater volume from the Bangor & Portland division of the D. L. & W. Railroad, to New England, than any other commodity. Witness selected cement as typical of the divisions between the Bangor & Portland Division of his road and the New Haven.

Witness thinks the mileage of that division is between 50 and 100 miles. The mileage of the entire Lackawanna road is just a few miles less than 1,000. The cement business is the bulk of the business that goes to New England on that division.

Witness did not say that this division is typical of the business that is interchanged between the Lackawanna and the New Haven. It is a thorough justification, and a typical illustration of how badly witness' road needs the arbitrary which it gets before prorating on the Bangor & Portland division. The Lackawanna has no other deduction before prorating.

Witness does not hold that out as illustrative of divisions between the Lackawanna and New Haven, but as illustrative of divi-
748 sions between the Bangor & Portland division and the New Haven.

Witness gave testimony in his direct examination as to fast freight line business moving over the Lehigh & Hudson and the New Haven to B. & M. territory. The haul of the Lackawanna on that business is about 345 miles.

Witness has not considered whether they would prefer to exchange that business with the New Haven by way of Harlem River. Witness said that the point of transfer was moved from Harlem River to Maybrook, at the urgent request of the New Haven. As witness gathered it from the papers, and from the history—he was not there—the Lackawanna was reluctant to make this change. At the time the change was made, witness would say the Lackawanna preferred to interchange at Hoboken. Witness knows that the Lackawanna is part owner of the Lehigh & Hudson. They do not control the Lehigh. They own a minority interest in it.

Witness does not know whether his road, with the Baltimore & Ohio, the Pennsylvania and the Erie own the whole of it. His understanding is that his road owns about 25%. He thought the Central R. R. of New Jersey owned some. He has not considered whether the fact that his road has an interest in the Lehigh & Hudson makes any difference to his road on the question whether the traffic should move by way of Maybrook or by way of Hoboken.

In his Exhibit 72, suggesting corrections in Mr. Eaton's figures, on the first sheet he does not differ from Mr. Eaton more than about three miles in any instance. Mr. Eaton made an error on his first sheet, which made the exhibit look worse for him than if he had shown the true figures. On the second sheet the differences are generally twenty-two or twenty-three miles, being the differences between Rotterdam and Mechanicville distances. These differences do not affect the percentages which Mr. Eaton figures in his exhibits. They are merely misstatements of the length of maximum and minimum hauls, but do not affect the deductions or conclusions in his exhibits. They merely affect the statement as to how far he hauled the traffic. The errors on the third page are of the same kind.

Referred to his testimony that for the haul from Maybrook to Boston over the New Haven and Boston & Maine, the New England

roads concerned are allowed for prorating a distance of 373 miles, and asked the corresponding distances that are allowed to the roads west of the Hudson on the same traffic, the witness said:

"The basis is 940 miles to Chicago. The basis is the dis-
749 tances which were allowed the Pennsylvania Railroad, and which were slightly greater than the Pennsylvania Railroad's actual, which, on Chicago, was 940 miles." This is traffic from C. F. A. lines to Boston via Maybrook. The respective allowances on that are 940 miles west of the river, 373 miles east, plus the terminal east. The actual distance by the route that that traffic follows through Maybrook, via the New Haven to Boston, is a little longer than the Harlem River distance, which is 260 miles.

Witness would suppose that the traffic coming into Maybrook, and destined to Boston over the Fitchburg division of the Boston & Maine, would go via Northampton. The actual distance would be 299 miles as against 373 constructive, plus the terminal.

Witness did not say that the traffic from Maybrook would go to the Fitchburg Division of the Boston & Maine via Northampton. He may have answered a question that might have seemed that way. If it went via Northampton, he would expect it to go over the rails of the old Central Massachusetts Railroad, down as far as North Cambridge, and over the Southern division into Boston.

If the traffic went via Springfield, the distance would not vary much from the Northampton mileage.

The Lackawanna gets no arbitraries anywhere along that line other than the one on their Bangor & Portland division.
750 The arrangement by which they began the handling of this traffic was made after the arrangement had been made between the Pennsylvania and the New Haven for traffic between similar points. They had to get that business in competition with the Pennsylvania route. The distance was longer.

Asked whether they were willing to take it if the New Haven would give it to them and allow the New Haven just the same terms as the Pennsylvania did, witness replied:

"That was done a good while ago. I cannot say exactly what actuated our people in putting that route in. They put it in."

Asked whether, if the old route was the short one, and was the established route, and if his road wanted to share in that business, they would not have to give at least as good terms, and whether they did not do so, witness replied:

"Why that was the state of affairs, yes."

Asked whether, if they did not want the business, they did not have to go after it, witness replied that it is understandable that one of these arrangements can be put in when a road does not want the business. "As a fast freight line manager, I have put in such arrangements and then asked people not to give me any business," but this is not just a paper route that has been under discussion. Business moves by it.

That is one point on which witness bases his opinion that New England divisions are liberal and adequate. Cement rates are another point.

One other point on which witness based his opinion that New England divisions are liberal and adequate, is that the New Haven, for instance, is divided into three groups on its fast freight line business. There is a group of 282 miles, one of 332 miles, and there is one of 393 miles. Every one of those is greatly in excess of the longest haul in the group, and the shortest group, 282 miles, is long enough to cover all of the business in the second group, 332 miles, and is long enough to cover all of the important business in the longest group of 393 miles.

The 393 miles is 52 miles longer than is necessary to cover the distance to Provincetown, which does not amount to anything. A representative point in that group would be a haul of 242 miles, to Fall River, and the distance, 393 miles, is 151 miles in excess. In that second group, the constructive mileage is about 82 miles longer than the longest distance. The shortest haul on that 289 miles is 29. If you take 29 and 249, which are the antipodes, that would be 278; dividing that by 2 would give you 139. You might say
751 139 is the average if you want to look at it that way.

Boston would be a typical point in the second rate group. It is the longer point, and the distance is 249 miles. It is 83 miles shorter than the constructive mileage. In the first group the short distance is 29 miles and the long distance is about 225 miles. The difference from the constructive mileage is 57.

In computing the actual mileage, witness did not include the 60 miles allowed for the floatage at Harlem River. He computed the actual mileage from Maybrook. There is no float in that.

If the float service had been included, and if sixty miles are allowed for the expense of that floatage, the answer is obvious to the question whether the actual would come very close to the constructive mileage. Prior to the transfer of the point of interchange from Harlem River to Maybrook, the interchange was being made through Harlem River where the sixty miles was allowed.

Asked whether his road accepted the same divisions that they had through Harlem River after they got their 25% interest in the Lehigh & Hudson and began to make their interchange through Maybrook, witness replied:

"I do not know whether it was after or before we acquired the interest in the Lehigh & Hudson River."

Witness presumes the Poughkeepsie bridge was a very expensive structure to build, and that it is a very expensive structure to maintain. He does not think that as a factor of expense to the New Haven Railroad in its route via Maybrook, the Poughkeepsie bridge is fairly comparable with the expense of its Harlem River floatage.

Asked whether he did not know a great many illustrations the country over where the establishment of such a bridge has been recognized by the carriers as a fair basis for the establishment of an

arbitrary, witness replied that he knew of it having been done, generally where the bridge was independently owned. Referred to the bridge at Council Bluffs he stated that he did not know the situation at Council Bluffs or who owns the bridge. He believes the Union Pacific does. There it is recognized that a considerable arbitrary was the proper thing to allow. He heard Mr. Campbell testify and heard him give a number of illustrations where an arbitrary had been based upon such expensive structures as that.

Witness would not agree that a structure as expensive as the Poughkeepsie bridge would be a basis for some allowance, in view of all the circumstances. The Lackawanna has a bridge which is a good deal more valuable than the Poughkeepsie bridge. It does not run over water, but over land, and costs millions of dollars. He does not think the Poughkeepsie bridge is nearly as valuable as
752 the Lackawanna's. The Lackawanna's bridge was built to save operating costs. Witness thinks the object of both is the same—to get somewhere easier. These constructive mileages on the New Haven are one of witness' points upon which he rests his opinion that the New Haven divisions are fair. Asked whether these are the three points, he replied: "Those are three points." Witness appreciates how long ago these divisions were made.

If it is true that the cost of operation in New England has grown 100 per cent more than the cost of operation west of the Hudson River, it would, in witness' opinion, have justified an increase in divisions which were reasonable to start with; but he considers the New England divisions properly to cover all those things now. His point is that when these divisions were established 30 or 40 years ago, they were too liberal to New England. He does not know what the conditions were 30 or 40 years ago.

Asked to say whether, assuming that the divisions were fair at the time, 30 or 40 years ago, when they were established, and if the expense of operation in New England has been increased 100 per cent, he would say that the divisions ought to be increased, the witness said:

"As Mr. Tood says, assuming that your assumption is correct, then I suppose something like that might follow."

Witness knows that when these divisions were established the roads west of the Hudson had a much longer haul on the great bulk of the interchanged traffic than the roads east of the Hudson. He
753 does not know that the terminal expenses of the New England roads were very considerably in excess of those which had to be borne by the roads west of the Hudson. He does not know what the New England expense is. He does not know anything to lead him to believe that the New England expense is greater than the trunk line expeense. He has not studied the New England expense. It has not, in fact, been recognized by the roads west of the Hudson for many, many years, that the New England roads were entitled to more than an actual mileage prorate because of the very fact of the

terminal e pense that they were under. It has not been recognized that they were entitled to it. It has been recognized that they have got it.

Up to a certain point witness would agree that the road that has the terminal work to do and has the short haul ought to get a larger revenue per ton mile than the road that has the long haul. That point is one of the things that you cannot exactly put your finger on; but witness will illustrate by saying: If one road hauls traffic 400 miles and another hauls it 100 miles, the fellow who hauls it 100 miles is certainly entitled to a greater per ton mile revenuue than the other fellow, all conditions being equal. If, on the other hand, the traffic travels 3,000 miles and is handled by a number of terminal carriers, one terminal carrier hauling it 100 miles and some other no longer and some a good deal longer, witness does not know
754 then that it is clear that the one delivering carrier who hauls it only 200 miles should receive greater revenue per ton mile than the whole balance of the lines, unless it be shown that the conditions on those terminal 200 miles are different.

Witness said that in his best judgment the average haul on interchange business on the lines west of the Hudson was quite a little in excess of 300 miles. He would expect it would be in excess of 400 miles. He does not know whether it would be in excess of 500 miles. He would not be will to say absolutely that it would be between 400 and 500 miles. It would certainly be over 300 miles. You can go 300 miles in Trunk Line territory itself, and the termini where a great deal of the traffic originates are more than 300 miles on an average from the gateway. Then you have the Pacific Coast, the South, and all, to come in.

Referred to the average haul of the New Haven, and asked whether the ratio would be sufficient to allow the operation of their terminals, witness said:

"It would be sufficient to allow the New Haven road greater revenue—somewhat greater revenue—per ton mile than any one carrier which might have performed all of the other service, aggregating, say, between three and four hundred miles. Now, you must bear in mind when you are comparing the New England haul with
755 the haul west of the Hudson River, that the haul west of the Hudson River may be split up among a number of carriers, and that there will be another fellow short-hauled."

If you divide simply on a mileage prorate, there is no possible way in which the New England road can get a larger per ton mile earning than the lines west. The only way to make it up is to give it a constructive mileage which will give it a larger revenue per ton mile than a mileage prorate. That is the principle which has been recognized in part in dealing with these divisions. Constructive miles are convenient for use in division work, for this reason: it enables you to know what your basis is. Now, we will say that the New Haven gets 332 miles. That goes up against certain other distances. In connection with one distance it produces one result; in connection with another distance, it produces another result. You can remem-

ber 332 miles, and you can compare that with something else; and for that reason a constructive distance, which hasn't anything to do with the actual distance, is kind of a key number. You might call it "units," as well as "miles"; but it is, witness thinks, the basis to use.

The principle in the first inception of these divisions with the New England roads was on a constructive mileage. The greater vice, perhaps, came afterwards in the application of the construc-
756 tive mileage. Whereas the constructive mileage, as allowed, does not cover anything like the distance, on their arrangement from Lackawanna to the New Haven road, after you cross the bridge and get down to Hopewell, where the New Haven Division arrangement commences, you run into territory where they are drawing 208 miles; then you go along for 100 miles or so, and you get into territory where they are drawing for less miles. Now, you cannot take and say what the excess of the constructive mileage is on the extreme and figure anything out on that measure, even if the principle is correct. Any change of conditions which involves additional expense, borne by the New England roads, which is not imposed upon the lines west of the Hudson, has got to be considered in connection with the rates.

Whether the imposition of heavier burdens on the New England roads should be considered in the adjustment of divisions would have to be considered in connection with the rate. The additional burdens of the New England roads might make it necessary to increase the rates to take care of that, and if the rates were increased and the New England lines given some part, then they would be getting a bigger division of the rate and the Trunk Lines would not get anything.

Witness does not think that, assuming that these through rates are fair, the imposition of the heavier burdens on the New Eng-
757 land lines would justify any readjustment of these divisions, for the reason that witness thinks the divisions were too great before any change that has been mentioned took place. If the rate was fair and the divisions were fair and the rate still remains fair and the New England expense has gone up very much greater than the trunk line expense, then it would be proper to accord some greater division to the New England roads, without a change in rates.

Redirect examination:

Witness never heard of any deductions or additions in the divisions on account of bridges across the Niagara River, or across the Susquehanna River at Harrisburg, or elsewhere. The Pennsylvania has a constructive mileage of 8 miles from Northumberland, Pa., to Sunbury, Pa. Witness does not know of any over the Delaware River, or over the Hudson River, or know any of the bridges between Baltimore and Philadelphia, on the Susquehanna River, for example, at Havre de Grace. He might not know if there were.

HENRY ADAMS, called as a witness by the defendants, testified:

Direct examination:

758 That he is general freight agent of the Erie Railroad, and has held that position for 15 years. He was in the traffic department of the Erie Railroad for 10 years before that, and in the service of the Erie Railroad Company prior to that a considerable time,—50 years.

The first through rates and divisional arrangements between the Erie Railroad and the New York, New Haven & Hartford Railroad Company became effective in 1896, the route being via Weehawken and Harlem River. The divisional arrangements, so far as witness can ascertain, were based largely, if not entirely, upon arrangements that were previously in effect between the New Haven Railroad and the Pennsylvania Railroad. Witness thinks they were made the same. The records are not entirely clear, but as near as witness can make out, they were practically the same. That route via Weehawken and Harlem River continued until 1901, when it was shifted to Newburgh, with little or no change in percentage division on account of the change in route; the float service at Newburgh being operated by the New Haven road. This float service is a little more than a mile long. That one mile float service was then substituted for the 13-mile float service between Weehawken and Harlem River.

That Newburgh route was continued in effect until 1904, when it was shifted to Maybrook. At that time the Maybrook-Poughkeepsie route was substituted for the Newburgh route, and the di-

759 visions of rates were revised by a reduction in Erie mileage of 30 miles, a reduction in New Haven mileage of 30 miles, with an allowance of 60 miles to the Central New England road as an intermediate carrier. Campbell Hall and Maybrook are one junction or yard between Maybrook and Campbell Hall. The Erie trains run right down into the Maybrook yard there. There is a difference of a couple of miles, the witness thinks.

The constructive mileages fixed as a basis for divisions at the time when the Maybrook route was established over the Erie on through traffic to and from points beyond the Western Trunk Line termini, gave the New Haven road 317 miles to Berkshire group points, to Boston group points 367 miles, and to Provincetown group points 428 miles. The mileages on the Erie side were the actual mileages to the Erie Railroad. To Chicago the Star Union-Pennsylvania Railroad mileages, were used, witness thinks. The actual mileage from Maybrook, in the first place, was about 950 miles. Chicago via the Erie is 18 miles nearer to Maybrook then to Newburgh. When the change was made they moved the Erie 18 miles west, deducted 30 miles from their mileage allowance, and 30 miles from the New Haven mileage, and gave the Central New England 60 miles.

On traffic moving via Niagara Frontier the Erie was allowed

760 the same mileages as were effective via the West Shore Railroad, or 366 miles, Buffalo to Maybrook; the actual Erie distance being 374 miles.

Witness has an exhibit which will show the divisions between the Central New England, the New Haven, and the Erie, on local business.

The exhibit referred to was received in evidence and marked Defendants' Exhibit 73, Witness Adams.

There was also introduced a map in connection with this exhibit, showing the groupings on the New Haven and on the Erie, in colors.

It was received in evidence and marked Defendants' Exhibit No. 74, Witness Adams.

The map and statement show the divisional groupings of the New England and Erie roads, with a statement of present divisions and prorating mileages as compared with a straight mileage prorate, and as compared with a 50-mile block basis with an extra allowance of 50 miles each for initial and terminal lines.

In the statement submitted, the comparisons are based on selected points located midway in each divisional group, without regard to the minimum or maximum haul in each group, and without regard to the principal tonnage points. Witness felt that that was as fairly representative as any statement could be made, or as any
761 group selected, whether you took the maximum, the minimum, or the principal tonnage points. It seems to him that a point located midway in each group is calculated to make it as clear as anything can be made.

In the understanding that was reached as to divisions, when they went via the Maybrook route, it was understood that the Erie Railroad to territory east of Maybrook, running down to Jersey City and Newark, would receive a percentage allowance as follows:

To or from the Berkshire group points, 22 per cent; Boston group points, 22 per cent; and Provincetown group points, 20 per cent.

This statement is based on these percentage allowances.

Witness has taken New Milford, Conn., as a midway point in the Berkshire group. The mileage allowed the New York, New Haven & Hartford Railroad, which witness understands includes the Central New England is 283 miles.

The witness would explain in this connection that the Erie Railroad is divided into five groups. Group A is the group which runs from Newburgh to Newark and Jersey City. That is the group where an allowance of 22 per cent. to the Erie Railroad was arranged. From the Berkshire group to Suffern, N. Y., the present prorating shows 80 miles for the Erie, and 283 miles for the New Haven.
762 That 80 miles is based on the 22 per cent. allowance to the Erie to which witness has referred. The balance is 78 per cent. to the New Haven. The 283 miles is produced by the 78 per cent. 78 per cent. is the governing factor in that statement.

In the Hancock group it works out that the Erie receives 41.2 per cent.; the New Haven, 58.8 per cent. The prorating mileage is 198 miles for the Erie, and 283 miles for the New Haven road. In that case the percentage is derived from the mileage. The 283 miles allowed to the New Haven is the determining factor. You will only find the percentages in the first group, Group A.

Taking New Milford again, in the Berkshire group, it appears

that the other three Erie groups give the New Haven a mileage of 333.

That is the mileage that they are allowed in the Berkshire group. Asked why it is that the Hancock group takes 283 miles and the Andover group 333 miles, witness said that that was the way the percentages worked out. It was the mileage prorate.

Springfield would be a midway point in the Boston group. The actual mileage, Maybrook to Springfield, is 168 miles. The prorating distance is 283 miles.

To Falmouth the actual mileage from Maybrook is 282 miles and the prorating mileage allowed is 394 miles.

The movement of the connection from Newburgh to Maybrook was desired by the New Haven Railroad. They wanted to change the transfer, and the Erie Railroad went along.

Witness' attention was called to Mr. Wood's exhibit showing the rates and divisions between the Erie and the New Haven,
763 and to the rates between Newark, on the Erie Railroad, and Hartford and Winsted on the Central New England, as given on the first sheet of Mr. Wood's exhibit, from which it appears that the mileage in New England to Hartford is 117 miles, and to Winsted 101 miles; and to Mr. Slater's testimony that on the interchange traffic from Maybrook, which was observed for a month, approximately 60 per cent. of the traffic was delivered or diverted from the main line to branches and delivered on those branches, between Maybrook and New Haven; the distance between Maybrook and New Haven being 122 miles.

Additional data furnished by Mr. Slater was received in evidence and marked Defendants' Exhibit No. 75, Witness Adams, and Defendants' Exhibit No. 76, Witness Adams.

Witness stated that the first class rate between Hartford and Newark gives the Erie Railroad, west of the junction, 13.9 cents. The revenue east of the junction is 36.5 cents. The mileage east of the junction is 139 miles, and west of the junction 63 miles. That represents the Erie's short haul point. Between Binghamton and Hartford the New England mileage is 139 miles; west of the junction, 164 miles. The first class rate is 80½ cents. The revenue to the New England carriers is 47.5 and to the Erie 33.2. Buffalo is a long haul in Erie-Trunk Line territory.

764 The New England mileage is 245 miles; west of the junction, 374. The first class rate is 93 cents. The revenue west of the junction is 44.3 cents; the revenue east, 48.7 cents.

Witness has prepared a statement of prorating and actual mileage on the selected list of the largest tonnage-producing points which the New Haven furnished. He has prepared the same thing for the Boston & Maine, Central of Vermont, and Maine Central.

These statements were received in evidence and marked Defendants' Exhibit 77, Witness Adams.

Witness was asked, on the basis of all his traffic experience and such study as he has made of the subject in this case, and otherwise,

what is his opinion as to whether the divisions between the New Haven and the Erie Railroad are fair and reasonable to the New Haven, and to this question he answered:

"I think they are extremely liberal to the New Haven Railroad. I don't see hardly how they can expect us to make greater allowances."

After the witness was excused, Mr. Taylor, one of the counsel for the trunk lines, made the following statement:

"I asked for information as to the total number of cars loaded on the New Haven road in the year 1919, and I am advised by the New Haven that the total number of cars loaded locally on the New York, New Haven & Hartford Railroad and the Central New England combined, for the year 1919, was 856,490. I understand that period is the same as the period used in Mr. Slater's testimony, in which he gave the total number of cars received and delivered by the New Haven, and that this figure is complementary to Mr. Slater's figure, in the sense that his figure included cars received from connections and delivered to connections, but did not include cars loaded on the New Haven line. So that this figure is to be added to the cars received from connections in arriving at the total number of loaded cars in the hands of the New Haven for the year.

I asked for information as to whether the traffic out of Maybrook for points north of Canaan moves primarily via the Central New England to Canaan, or in greater volume via Danbury; and I am advised by the New Haven that it moves primarily via the Central New England to Canaan and not via Danbury. That has some bearing on the distance which that particular traffic moves."

Adjourned to Tuesday, January 25, 1921, at 10 o'clock A. M.

765 Washington, D. C.,
Tuesday, January 25, 1921—10 a. m.

HENRY ADAMS resumed the stand and testified further:

Direct examination continued:

In 1904, when the Maybrook route was established, an understanding was reached regarding the percentages which would apply. Between Berkshire and Provincetown points and stations on the Erie west of the Wellsburg group, the New Haven Railroad was to be allowed, on Berkshire points, 333 miles; on Provincetown points, 394 miles. On the Wellsburg group the New Haven was to be allowed, to Boston points, 283 miles; Berkshire points, 283 miles, and Provincetown points, 394 miles.

The point named in witness' statement on the Erie, which is in the Wellsburg group, is Hancock, about midway in Group B.

Suffern is in Group A; Andover is in Group C. Group B is referred to as the Wellsburg group. The group covered by Hancock is governed by mileage. The mileage is different in that group from

766 what it is on the following groups, and so far as the Berkshire group is concerned, and on the Boston group, the change follows the group represented by Andover. In other words, it is one group further down; and on the Provincetown group the mileage is the same—prorating, of course,—on all the last four groups. That is all in accordance with the agreement which was made between the Erie and the New Haven at the time when the Maybrook group was established.

Cross-examination:

The mileage in witness' statement under the column headed "50 mile block with 50 miles additional" is the actual mileage. Taking the New Haven's proportion in Group A, it being New Milford and Suffern, N. Y., 90 miles is the actual mileage.

Witness gave the New Haven 150 miles because the distance would give them three blocks. The actual distance to the outside point in the group would be somewhere between 100 and 150 miles, which allows them the three blocks.

Witness' computation under the heading of "50 mile block with 50 miles additional" is based on a 50 mile block with 50 miles to the initial and the terminal lines added. That is a pretty fair way of arranging divisions.

767 Witness thinks mileage is the chief factor in divisions. In expressing his opinion that the divisions on the New Haven were fair and liberal, witness had not particularly made any study of the cost of rendering the service by the New Haven. He had not particularly given any consideration to the needs for revenue of the New Haven, or to the importance of the continuation of the New Haven as a public carrier. He had simply given attention to the question of respective mileage and the cost of maintaining and operating the Erie Railroad, as well.

He had just reverted to the old method, which was in vogue when he became a railroad man, and which has been in vogue for a good long period of years, of thinking of mileage.

Referred to the column headed "Springfield, Massachusetts," in Group A, and asked whether, even as it is, the New Haven receives as its proportion less than the actual mileage prorate, the witness answered:

"A little less than the actual mileage prorate; yes, sir."

This is notwithstanding how many junction points that traffic may pass through, or what it might have to do with reference to handling that traffic and getting the cars back again. Between Springfield and Hancock the New Haven receives a little less than the actual mileage prorate.

Under the Falmouth heading, Group A, the New Haven receives less than an actual mileage prorate, quite a good deal less, 80 as against 88.9.

768 Referring to Group B, the Provincetown group, witness said that the New Haven receives less than an actual mileage prorate.

Redirect examination:

Witness is not at this time suggesting any change in the divisions between the Erie and the New Haven. He would like to. They would be glad if they could revise the percentages and make them a little more liberal to the Erie Railroad.

A. J. ANDERSON, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is assistant general freight agent of the Baltimore & Ohio Railroad Company, and has been connected with that company about 25 years, practically all of that time in connection with traffic matters.

The Baltimore & Ohio does not interchange any traffic directly with the New England carriers. They have to use intermediate trunk lines. In the case of eastern traffic, working through Harlem River, they use the Philadelphia & Reading, and the Central Railroad of New Jersey. Working through the northern New
769 England junctions, they use from certain of their territory the Pennsylvania Railroad, Philadelphia & Reading, Central Railroad of New Jersey, Lehigh & Hudson River, and Delaware & Hudson.

Maybrook is the most important gateway. Generally speaking, the business originating west of Cherry Run, Va., would move through the Maybrook gateway. Baltimore & Ohio percentages with the New England carriers are generally built up based on the Pennsylvania Railroad divisions. Those Pennsylvania arrangements were in existence before they had any working arrangements with the New England carriers; and, generaly speaking, they are competitive at most points with the Pennsylvania Railroad, and in putting in those arrangements, it was necessary for them to put them in on the same basis as the Pennsylvania Railroad.

On the Eastern section of witness' road, such as Baltimore and Philadelphia, their mileage is practically the same as that of the Pennsylvania working through Harlem River. On the Western end of witness' road, say from Pittsburgh, their mileage is considerably in excess of the mileage of the Pennsylvania Railroad. In other words, the Baltimore & Ohio accepts divisions based on the Pennsylvania distance of 452 miles between Pittsburgh and Communipaw; whereas, applying that to the route from Pittsburgh to Maybrook, it is based on a haul of 515 miles. That is the
770 actual movement via witness' lines or their connections. In the movement from Pittsburgh to Maybrook, 5 roads participate. On business moving from Pittsburgh via Maybrook it would move over the Baltimore & Ohio as the initial carrier, Pennsylvania Railroad—that part which was formerly the Cumberland Valley—Philadelphia & Reading Central of New Jersey and Lehigh & Hudson River. The divisions accruing to those lines would be divided into five parts.

Witness made a certain study based on the exhibits already filed by the New England roads, in order to ascertain whether any light can be obtained on the relative fairness of the divisions east and west of the gateways. He took the points furnished by the New England carriers subsequent to the previous hearing, for the purpose of showing the actual mileage as compared with the prorating mileage, and what the excess mileage is of the prorating mileage over the actual mileage.

His statement is similar to that introduced by Mr. Wright.

Witness introduced a statement which was received in evidence and marked Defendants' Exhibit No. 79, Witness Anderson, showing a comparison of the prorating mileages with the actual mileages from points on the New Haven Railroad;

And a statement which was received in evidence and marked Defendants' Exhibit No. 80, Witness Anderson, showing a
771 comparison of the prorating mileages with the actual mileages from points on the Boston & Maine.

Witness has not included on these statements any similar statement for the mileages, constructive and actual, west of the gateways.

Generally speaking, the principal points from the point of view of tonnage in each of witness' groups, are near the extreme end of the group.

From their important tonnage territories the actual mileage, the extreme actual mileage in the group very closely approximates the prorating mileage. There are some groups in which the Baltimore & Ohio draws for some constructive miles. Generally speaking, if it is in excess, it is not materially in excess. There are groups in which it is less than the actual mileage,—for instance, the Pittsburgh group. In the Pittsburgh group the actual mileage is 515 to Maybrook, and the prorating mileage is 452 miles.

Witness has made another study of the situation with a view to obtaining some light on the fairness of these divisions. He has prepared an exhibit involving certain short haul points east and west of the New England junctions. The purpose of this exhibit was to show a comparison of certain short haul points east and west of New England junctions and how the divisions compared; for in-
772 stance, taking one set of points 50 miles west of the junction and approximately 100 miles east of the junction, and, on the other hand, points within 50 miles of the junction east of the junction and approximately 100 miles west of the junction. This was for the purpose of ascertaining whether, when the mileage changed, there was a corresponding advantage both east and west. This has been put in the form of an exhibit, which was received in evidence and marked Defendants' Exhibit 81, Witness Anderson. The first group of points shows points in which the predominance of mileage is east of the junction. The second group of points shows where there is a similar predominance west of the junction. Then witness ascertains how those rates divide and compared the top group with the bottom group. The recapitulation shows in a general way what that discloses. The recapitulation is based on taking the total hauls and the total revenue per ton, based on the first and sixth class

rates. The result of that is that the average ton mile earning on first class for the short hauls west of the New England junctions is 6.13 cents, and for the short hauls east of the junction 12.46 cents. On sixth class, respectively, it is 2.45 and 4.81 cents.

For the long hauls west of the New England junctions, the ton mile earnings on first class are 4.18 cents, while for the long hauls east of the junction the ton mile earnings first class are 5.37
773 cents. On sixth class, respectively, they are 1.60 and 2.17 cents.

Asked whether the points that he selected represented reasonable amounts of tonnage, the witness answered:

"No, Mr. Bikle. This exhibit is based on information furnished by the Trunk Line carriers shown on the exhibit. No particular regard was given to the matter of tonnage. In fact, in asking for this information we selected the points and asked the particular carriers for information as to the divisions."

The purpose was simply to find points in the groups that were a relative distance on one side or the other, and then study the effect of the predominance of mileage, to see its influence on one side, and then its reverse influence when the situation prevailed on the other. This exhibit shows that the New England lines receive the better earnings. The total hauls are actual mileage in the recapitulation.

Referred to Exhibit No. 80 and Exhibit No. 79, and asked whether he had some comment to make upon the situation and what he calls the Harrisonburg Branch of the Baltimore & Ohio, the witness replied:

"I wanted to make comment in particular as to the prorating mileages on your line south of Winchester, Va. As to that particular territory, the Boston & Maine Railroad draws 50 miles in
774 excess of the mileage from adjacent territory north of Winchester and on our main line in that vicinity. That was due to the fact, as I understand it, that that basis of divisions was in effect on the Harrisonburg Branch of the Southern Railway, and it was necessary for us to accept divisions based on that excess mileage, as compared with the other prorating mileage for similar territory."

That is practically the case, that the further the Baltimore & Ohio hauled it, the more division the New England lines got out of it. It works out that way because of the competitive relation witness has mentioned with the Southern Railway.

Cross-examination:

Referred to Exhibit No. 79, and the heading "Actual — east of Harlem River," and asked where he got those distances, the witness stated that he obtained these from the distance tables of the New Haven road.

The actual mileage from Boston to Harlem River is 207, as witness figured it. The connection is on the Jersey shore. This does not

include anything for the floatage, which is covered independently of the prorate.

In the column headed "Harlem River," nothing is included for the distance from Communipaw to Harlem River, because
775 that is covered by the arbitraries for the steamer Maryland. Witness thinks this gives credit for the actual miles. Witness cannot see that 11 miles ought to be added in there. The New Haven road receives an arbitrary allowance for the steamer Maryland's services. Where there is a mileage allotment for that service, it is provided for in the exhibit.

The exhibit No. 79 has not anything to do with rates or arbitraries. It deals simply with the question of mileage, and is intended to call to the attention of the Examiner in a striking way the difference between the actual mileage and the prorating mileage. Witness does not see that to do that fairly it is necessary to compare the real actual mileage that they cover with the prorating mileage for which they get a revenue. In all cases where the arbitraries apply, witness has excluded from the actual mileage of the New Haven the distance from Communipaw to Harlem River.

Witness understands that those who prepared the statement for him used the I. C. C. station list of the New Haven road. He has taken the shortest line between Harlem River and these points, irrespective of the way the traffic moves. He thinks that is proper.

Asked whether, in dealing with actual miles, they have to take the actual miles the traffic moves, the witness said:

"We wouldn't know whether the New Haven, for some
776 purpose of its own, hauled the freight via a longer route."

Ordinarily, in figuring rates and percentages, you would only take into consideration the short line. It might be that the actual mileage then becomes something that has got to be explained and qualified considerably, and it does not mean the actual mileage the way the traffic moves. It might mean the shortest theoretical line, without respect to whether it is used or not.

Referred to the heading "New London," and asked whether his arithmetic is not at fault there, and the New England lines short about 19 miles instead of 81 miles over, the witness said:

"Yes; I think that is correct. It should be 19 miles in that case."

Witness' impression is that the prorating mileage is wrong. It should be 200 miles.

Referred to Defendants' Exhibit No. 81, and the heading on the right side of the exhibit, "Ton mile earnings (in cents per ton)", and to the summary "Average ton mile earnings." and asked whether he added those columns together and got a footing, and there being 14 of these items, divided that total by 14 in order to get their average ton-mile earning, the witness answered:

"No; we did not do it that way. I don't think that would be a proper way to get it."

To get the average ton mile earnings, witness had to take
777 the total miles and the total rate, and divided the total mileage into the total rate. He took the total of the rates themselves.

The figure of 6.13 cents as the average earnings west of the junction on first class was obtained by adding the rates together. They added those rates together and added the total miles together, and divided the total rate by the total miles, with the result as shown.

In arriving at an average by that method, the average is considerably affected, as to the very short haul, by the fact that you include the ton mile earnings east of the junction to a point as near the junction as New Rochelle, where the New Haven has a very short haul and where the ton mile earnings are very high. That will work both ways.

New Rochelle was included twice, so that witness got the benefit of some very large ton mile earnings in cents, although it might cover a very minute volume of traffic. It happens to be a short haul point. These averages are what might be called paper averages, and haven't any reference to the actual volume of traffic moving to the different points. Witness did not have any information as to the volume of traffic. The weighted average, figured with reference to the volume of traffic, might change the ton mile earnings somewhat.

If the tonnage moving to a place like Worcester was 100
778 times in excess of that moving to New Rochelle, it would make an enormous difference in the summary. The summary is based upon the proposition that there is just the same number of tons moved to New Rochelle as moved to Worcester.

The witness thinks the figures in the main exhibit, under "Ton mile earnings," would have been sufficient. He would not like to advise his president that that summary is an accurate method of finding out what his earnings were. He would prefer to take the figures under the column of ton mile earnings.

Referred to New Rochelle, where the New Haven has a very short haul, and the lines west a very long one, that is, 183 miles west as against 25 miles east, and the ton mile earnings are shown as 3.40, and east of the junction 34.32, and asked whether, if the situation were reversed, the ton mile earnings would be very near reversed, the witness said:

"These ton mile earnings, of course, ar on the high basis indicated, because for that 25 miles you get a prorating mileage of 282 miles."

Referred to Port Jervis and Campbell Hall, where defendant lines have 198 miles and complainant lines, 283 miles, and the ton mile earnings are 17.43 west and 4.03 east, the witness said:

"In asking for this information, Mr. Choate, we selected
779 Port Jervis as apparently a typical point. Now, it happens to be in a long haul group on the Erie Railroad. We did not know anything about that at the time, and we put all the information we obtained right in the exhibit."

The Baltimore & Ohio receives an arbitrary on its Washington block of 3 cents per 100 pounds. The witness thinks that that includes all classes in the Washington block. It is on the same basis as the Pennsylvania Railroad arbitrary.

Asked what it is for, the witness said:

"As I have stated, Mr. Choate, our per cents with the New England carriers were predicated on the Pennsylvania Railroad arrangement."

The Baltimore & Ohio does not include the Union Railroad in its mileage; but it has an equivalent situation down there that witness thinks entitles them to it, just as much as the Union Railroad; that they had to accept the situation that existed with the Pennsylvania Railroad.

The Baltimore & Ohio has a very expensive tunnel in Baltimore. If there is any excuse for it, he thinks that would be it. That 3 cent arbitrary is not taken into account in computing the ton mile earnings in Exhibit 81. As a matter of fact, Exhibit 81 does not involve any point on the Baltimore & Ohio Railroad. That exhibit is prepared covering these short haul points east and west of
780 the New England junction. It does not include B. & O. points. It does not include Washington.

Referred to Exhibit 80, and to the second column, under the heading "Acual — east of Harlem River," to Boston & Maine points, and asked how he obtained those figures, the witness said that he understands those are the figures via that route. The route is the New Haven and the Boston & Maine. Witness cannot tell offhand how the traffic moves.

Referred to a statement said to have been made by Mr. Lawrence that the actual distance, Harlem River, via Northampton, and thence over the Boston & Maine to Boston, was 299 miles, the witness said he did not note that statement particularly.

The traffic should move via the shortest practical and most economical route. Assuming that it is 299 miles from Harlem River via Northampton and Boston & Maine to Boston, witness would say that that is a waste of transportation, all things being equal.

The figures were made in witness' office, but he did not check them. The customary way of doing it in figuring such things is to take the shortest route, regardless of whether the traffic actually moved over it or not.

The exhibit covers the entire property of the Baltimore & Ohio east of the Ohio River. Witness could pick out quite a number of places where his road gets excess mileage on its side of the
781 line. They are rather limited by comparison.

Redirect examination:

It is true that considering the general stucture of these rates, most points in both territories receive more in the way of prorating mileage than actual mileage, because of the facts that the actual mileages are allowed to the more distant points in the group. That must be

true wherever you have a block grouping of mileage. The significance is the extent to which the prorating mileage exceeds the actual, rather than the fact that it does exceed it.

Referred to his Exhibit No. 81, the witness said that in the recapitulation the 511 miles represents the total of the first seven instances covering the movement west of the New England junctions. That is a simple addition of the third column. The 443 miles compared with that is the addition of the last seven figures in the fourth column. The 1319 is the addition of the seven figures in the fourth column; and the 1,429 is the addition of the second seven figures in the third column.

They added together the proportion per 100 pounds and translated it into an amount per ton.

Having gotten that revenue per ton by the simple process of division, they ascertained what the earnings were east and west. It is not at all an average of averages.

782 The earnings east of the junction, 34.32, are about ten times the earnings west of the junction, 3.40. Turning to the movement between Port Jervis and Campbell Hall, the movement there is about six times east as compared with one west. The lines west of the junction, per ton mile, receive only about 4½ times—hardly that—the per ton mile earnings of the lines west. When the lines west have the short haul, they do not profit per ton mile earnings relatively to the lines west when they have the short haul.

That was the purpose of this exhibit, to show that upon the shorter hauls or on the hauls between the two territories, when the lines east have the short haul they get a much better ton mile earning than when, in the same way, the lines west have the shorter haul and the lines east the longer.

Referred to the suggestion that it did not indicate the actual movement of the traffic, and asked whether in that way it was like the exhibits of the New England lines with respect to earnings and divisions, the witness answered in the affirmative.

Witness thinks that this is illustrative.

In no instances where the arbitraries applied, has the witness included the 11 miles for the float service.

783 Where the arbitraries do not apply in cents per 100 pounds, but the compensation for the steamer Maryland service is represented by 60 miles, for instance, the 60-mile figure appears in these total mileages.

The theory on which witness has based this statement is that the arbitrary deductions cover the service of the floatage between the two points, Greenville or Communipaw and Harlem River. Therefore, the actual mileage as shown is the actual mileage which is represented in the division of the money. As witness sees it, if he had added the floatage service, there would be a double representation of that service in the division of the rate.

If there is not the terminal deduction on account of that service, but that service is represented by an addition to the constructive mileage, then witness does show the floatage mileage as a part of the actual mileage.

In other words, the comparison is intended to be made between the constructive mileage and the actual mileage, which that represents in the division of the rate.

In selecting these figures as showing the mileage east of New England, witness has derived those from the New England divisions. That is his understanding of the basis from which they were figured. They represent workable routes—witness means, routes that are available for the movement of traffic.

784 Recross-examination:

Referred to Exhibit No. 79, and asked to start at the top of the second column and indicate which one of those actual miles east of Harlem include the distance from the Jersey shore to Harlem River, the witness said:

"If I understand your question correctly, Mr. Choate, in the column of figures under the heading 'West of Relay and Washington to Cherry Run, West Virginia,' for Port Chester, we show the actual haul east of Communipaw as 34 miles."

That includes 13 miles for the steamer Maryland service.

In the first column, under "West of Philadelphia to Washington, D. C.," where witness has allowed 21 miles to Port Chester, that column does not include anything for steamer Maryland service.

Going over to "West of Relay and Washington to Cherry Run, West Virginia," where the witness has allowed 34 miles, he has allowed 13 for floatage. This 13 miles is the actual mileage.

In Exhibit No. 81, under the summary "Recapitulation, Average Ton Mile Earnings," witness has shown that on the long hauls roads west of the junction earn 4.18. The roads east of the junction earn only 5.37 on their long haul.

785 W. J. STORY, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is general freight agent, Delaware & Hudson Railroad Company, and has held that position for 4 years. In his capacity as general freight agent of the Delaware & Hudson Company, he has direct charge of the divisions on traffic interchanged with the New England connections.

The Delaware & Hudson has a direct connection with the Boston & Maine Railroad at Mechanicville, at Troy, and at Eagle Bridge, N. Y.; with the Central Vermont Railway at Rouses Point, N. Y.; with the Rutland Railroad at Rouses Point, N. Y., and Rutland, Vt.; and with the Boston & Albany Railroad at Albany, N. Y.

The principal junction point is Mechanicville, their connection with the Boston & Maine Railroad.

Witness has prepared a statement showing the divisions on traffic moving between certain representative points, between the Delaware

& Hudson Company and its connections, and the Boston & Maine. That statement contains the actual divisions and comparisons made with divisions made according to other methods.

The statement was received in evidence and marked Defendants' Exhibit 82, Witness Story.

786 Asked to explain in a general way the theory upon which this statement had been prepared, and what it shows, the witness said:

"This statement was prepared to show the present divisions between 29 Boston & Maine Railroad points, 29 of the points out of the 30 submitted by Mr. Eaton as representative Boston & Maine points, and 10 representative points on the Delaware & Hudson Company, 3 representative points in Trunk Line territory, and 2 representative points in C. F. A. territory.

"The exhibit is divided up into four bases or columns: Basis one shows the actual percentage divisions as they exist today. Basis two shows how the divisions would look if actual mileage prorates were used. Basis three shows how the divisions would be made on the basis of 50-mile blocks for all carriers interested; while Basis No. 4, which we considered to be a very liberal percentage arrangement between the carriers, is worked out on the plan of 50-mile blocks for the terminal carriers, plus an additional 50 miles representing the terminal; and the intermediate carriers are figured at actual mileage."

Asked to take his exhibit as a whole, and say how the results of the present divisions compare with divisions according to the other methods, the witness said:

787 "Either of the three methods shown in this exhibit, that is, basis 2, 3 or 4, if applied in connection with the movement of traffic between New England and points west thereof, would result in a material reduction in the New England lines' revenue."

It is correct to say that the present divisions are more favorable than the divisions made according to any one of the three other methods.

Pages 2 to 11 show the comparison between the Boston & Maine stations, and the stations on the Delaware & Hudson Company. In fact, the index on the front of the exhibit shows how it is made up.

Pages 12 and 13 show the divisions between Boston & Maine points and Buffalo, N. Y., via the Erie Railroad. Pages 14 to 17 inclusive show comparisons on Chicago and Cincinnati. Pages 18 to 21 inclusive show comparisons on Baltimore, Md. and Pittsburgh, Pa., via the Pennsylvania Railroad; and pages 22 to 27 inclusive the comparisons on westbound traffic to C. F. A. territory, applying via the D. & H. Company, Pennsylavnia Railroad, and Pennsylvania lines. Pages 28 to 32 show the same situation eastbound.

Cross-examination:

788 The theory witness wants to present by this exhibit is to contrast the present basis of divisions with three suggested bases of divisions, a division based on actual mileage, a division based on 50-mile blocks, on each side of the junction, and a division based on 50-mile blocks, plus a 50-mile allowance on each side, for each road interested, whether there be two, three or more. Witness has not given any consideration in this suggestion to the revenue needs of either road, or to the cost of operation of either road, or the number of junction points that may be involved in the handling of the traffic on either side of the junction point. He has confined his attention strictly to the matter of miles, mileage being generally recognized as the proper measure of rate divisions. He has given no attention to any considerations of diffusion of traffic on either side of the junction point.

Scranton is in the heart of the coal region on witness' line. Boston is a point to which there is a very heavy movement of coal from Scranton.

Referred to his second suggested basis, witness stated that the Boston & Maine gets exactly the same under the present plan as it would on the division based on actual mileage. On his third plan it gets slightly less. On his fourth plan it gets slightly less. These

789 divisions do not apply on coal. A very large proportion of the Delaware & Hudson interchange with the Boston & Maine is coal. The divisions apply on anything provided with a classification in the consolidated classification, 1 to 6, and all commodities are divided on this. There is no sheet in this exhibit which shows anything about coal. It covers all articles provided with a classification or rating in the consolidated classification. It covers divisions on such commodities as cement and brick, and practically everything except coal.

Scranton is a heavy shipping point for other commodities than coal, a large distributing point. Witness presumes there would be a good volume of traffic which moves between Scranton and Fitchburg. At the present time the Boston & Maine gets 41.4. On actual mileage it would get 41. On Basis 3 it would get 43. On Basis 4 it would get 44.

Asked why he suggested Bases 3 and 4, the witness said:

"Well, I do not really suggest Basis 3. That is the 50-mile block basis. Many divisions are made in that way. Basis 4, we think, is probably more liberal to the short haul road."

It is quite natural that they should use, for comparison's sake, a method employed very generally in trunk line territory. Basis 3 and Basis 4 are used very extensively in dividing rates, in trunk line territory.

790 Referred to page 5, and the first item, Albany to Boston, the witness said there is quite a heavy movement of merchandise traffic there. The Delaware & Hudson is not, in the main, a bridge carrier.

Traffic is not received from the New York Central and transferred by witness' line to the Boston & Maine. The Boston & Maine, in business between Albany and Boston, is allowed 80 per cent. If they got an actual mileage prorate, they would get 91 per cent. On traffic to Worcester they get 80 per cent., and if they got actual mileage prorate, they would get 89 per cent. On traffic to Fitchburg they get 80 per cent. If they got an actual mileage prorate they would get 88 per cent. These are fairly heavy points, and a good deal of traffic moves there.

There is a lot of business moving from Albany to Chicopee. They get 85 per cent.; an actual mileage prorate would be 86. To Holyoke they get 85; an actual mileage prorate would give them 86. To Springfield they get 85; an actual mileage prorate would give them 86. To Keene they get 85; an actual mileage prorate would give them 86. Bellows Falls is a considerable mill town. There are big paper mills there. They get 85; an actual mileage prorate would give them 87. Claremont, N. H. is a good sized place. There are some mills there. They get 85; an actual mileage prorate would give them 89. It must be remembered, however, that Albany
791 is the shortest haul point on the Delaware & Hudson Company. It was put in to show the exact situation.

Referred to his page No. 6, Saratoga Springs & asked whether that whole page shows that the Boston & Maine gets very much less than a mileage prorate to all points shown, to Boston, the witness said that Saratoga is another short haul point 19 miles from the junction point.

Referred to Glens Falls, N. Y., on his page 7, the witness said that the Delaware & Hudson haul is 41 miles and that the company receives a constructive mileage of 91 miles.

The Boston & Maine is given a constructive mileage of 2 miles. At Waltham witness' line gets 100 per cent. constructive mileage and the Boston & Maine gets 12 miles. The divisions between the Delaware & Hudson and the Fitchburg division of the Boston & Maine are very liberal. The divisions are very liberal to both the Boston & Maine and the B. & A. (Sic.)

Referred to the bottom of page 7, the last three items on that page, traffic between Glens Falls and Rochester, N. H., witness stated that the actual mileage haul of the Delaware & Hudson Company there is 41 miles and his line gets a constructive mileage of 172. If that was divided on the basis of mileage prorate, the Boston & Maine would get 84 per cent. instead of 76.8. The Boston & Maine also draws for 145 miles constructive.

Referred to page 8, Rutland to Boston, witness presumes
792 it is fairly accurate to state that there is more tonnage moving between points on his road and Boston than any other single point. Witness' line gets a constructive mileage of 20 miles, and the Boston & Maine gets two miles. On an actual mileage prorate the Boston & Maine would receive 73 per cent. of the rate instead of 67.4.

Referred to Beverly, on the same page, the Boston & Maine gets 67.8. On an actual mileage prorate they would get 74 per cent. There is very little traffic which moves from Rutland, Vt. to Bev-

erly via the Delaware & Hudson Company and the Boston & Maine. It moves directly via the Rutland Railroad.

Referred to page 9, the first item on that page, Port Henry to Boston, the witness said they divide practically on a mileage prorate there. The Boston & Maine suffers a little. At Berlin, N. H., there is a large paper business there, a large pulp business. The Boston & Maine gets 67.8, and on an actual mileage prorate, would receive 73.

Referred to page 10, Plattsburg to Boston, the Boston & Maine gets a little less than an actual mileage prorate.

Referred to page 11, Standish, N. Y., to Boston, the witness' line gets an excess mileage of 34 miles, and the Boston & Maine gets 2 miles, receiving 46 per cent., and under an actual mileage prorate they would get 50.

793 Referred to page 18, between Baltimore & Boston, the Boston & Maine gets 28 per cent. and an actual mileage prorate would give them 30. Between Baltimore & Waltham the Boston & Maine gets 28, and a mileage prorate would give it 29. On business between Baltimore and Boston the Pennsylvania Railroad gets 41.9, and a mileage prorate would give it only 35 per cent. So far as the figures on that sheet go, it would seem to indicate that the Pennsylvania Railroad is getting the long end of the stick from both the D. & H. and the B. & M.

Referred to page 14, Chicago to Boston, and asked whether it is true of the figures shown on that sheet that the Erie Railroad is getting the long end of the stick on those divisions, as against both the D. & H. and the Boston & Maine, the witness said:

"No, I would not say that. The Erie's distance is 774 miles, and that is all they draw for. The Boston & Maine's distance is 187, and they draw for 210, while the D. & H. draws actual."

The traffic between Chicago, over this route, to all the different points shown on page 14, is of a very general character, a very great variety of traffic.

Referred to page 20, Pittsburgh, the Boston & Maine hauls 187 miles, and it gets 26 per cent., which is exactly the same
794 amount it would receive if it was allowed a mileage prorate. To Waltham it gets 26. A mileage prorate would give it 25. Witness does not think that sheet shows that the Pennsylvania is getting more than it is entitled to on all that business.

Referred to Claremont, N. H., the witness stated that the actual mileage of the Pennsylvania is 309 miles, and it draws for 450. The same to Beverly, Biddeford, & Chelsea. The reduction of the Pennsylvania's distance to actual would not help the Boston & Maine at all. It would help the D. & H. substantially. A large portion of the business of the D. & H. that is interchanged with the Boston & Maine is business received from other carriers. None of witness' sheets show that business at all, except as to Chicago and Pittsburgh, Buffalo, Baltimore and Cincinnati.

Referred to his page No. 28, showing the divisions between Chicago and various points, witness stated that the Boston & Maine is getting

17.9. On his fourth basis it would get 19. On the Waltham business there would be the same increase. On all that business that is overhead business, witness' line would gain considerably if their division was on a mileage prorate. Witness will not attempt to say whether the present division is fair to his line or not. It has been in force for a number of years, and witness has not really
795 considered its fairness with respect to the Delaware & Hudson Company.

Witness has been giving considerable thought to the fairness as between the Delaware & Hudson and the Boston & Maine, but he has not thought of this, not as to the overhead traffic.

Witness' proposition No. 4 provides for allowing something less than the mileage prorate where they are merely a bridge carrier.

Referred to his page No. 22, Chicago to various points on the Boston & Maine, witness stated that in practicaly every illustration that he has given on that page, the Pennsylvania receives approximately a mileage prorate. Witness' figures do not include the Boston & Maine's one-cent per 100 pounds. These are merely the percentages, and the note at the bottom of the page shows where it is deducted. The one cent terminal is in addition in all cases.

Referred to the sheets dealing with Chicago, Cincinnati and other points west, and asked why he grouped the percentage of the B. & M. and the D. & H., the witness said:

"I understand that was done many years ago, at the request of the Boston & Maine. The Pennsylvania Railroad, the western lines, was divided up into about 165 groups, and the proportion east and west of Wilkes-Barre, or rather, the revenue, was split at
796 Wilkes-Barre, east and west. In order to help the Boston & Maine in their prorating arrangements, they required an average percentage in order that they might bill up to Wilkes-Barre, and that average percentage has been applied and worked out. It is a very, very old arrangement."

Witness has been with the D. & H. about 7 years, and these divisions go back long before his time.

Referred to his page No. 25, the witness stated that from Cincinnati to Boston, the Boston & Maine is receiving a fraction less than a mileage prorate. Any block basis for divisions must apply over the whole line.

Referred to his page 20, Pittsburgh to Boston, the witness stated that the Boston & Maine receives just exactly a mileage prorate and that is bridge traffic for the Delaware & Hudson. The traffic is received at Wilkes-Barre.

Witness' line handles a good deal of cement into New England. They have two cement mills on the Delaware & Hudson Company, one at Howes Cave, and one at Glens Falls, N. Y. There has never been a train of this traffic to the best of witness' knowledge and belief. He does not think the cement business into New England is handled in more than one car at a time. Two, he thinks, would be an exception. Witness' line handles a good deal of cement that comes from other roads over his, into New England.

It reaches his line at Wilkes-Barre, coming via the Central
797 Railroad of New Jersey or the Lehigh Valley Railroad. He has never known of a trainload of cement. They might get three or four cars at a time. Sometimes they might get as high as eight. Witness doubts very much if they would ever get more than eight cars of cement at one time. When it is delivered to the Boston & Maine, it may be scattered anywhere over its system. There is a large quantity of grain moving in solid cars over witness' line from the Boston & Maine, in connection with the Erie Railroad. Witness presumes there are quite a few cars in a train at one time. They would come to his road at Binghamton from anywhere west of New York State. That should be looked for on his sheets with respect to Chicago.

Redirect examination:

Witness has taken his actual divisions and compared them with results reached by taking three other methods of divisions. The method stated in the fourth column takes into consideration a 50-mile terminal for the originating and terminal lines, and an actual distance for the intermediate lines. Witness stated that he considered that as a proper method of making divisions, and as being just and equitable. It is very liberal. Taking his tables as a whole, practically all of the items show that, applying that method,
798 the divisions are less favorable to the Boston & Maine than those that they now receive.

Witness took his third method, based on 50-mile blocks, because it is a method common in railroad practice, and he deemed it proper to use it; and taking that method, taking the figures as a whole, the result shows more favorably to the Boston & Maine, under its actual divisions, than it would by that method. The actual mileage method is an impossible method. The actual mileage method, in cases like Saratoga and Albany, and other cases where the point is near the junction, are never just to the carrier that has the short haul, because he has no allowance for the terminal charge.

Referred to page 22 of his exhibit, and asked whether, taking the first item, it is true that the Boston division is 67.9, which represents the actual and is the present division, and would compare with 66 on mileage, and in the next case it is 67.9 as compared with 67, the witness answered in the affirmative.

Asked whether, following down the rest of the table, the fourth is 67.7 as compared wth 68, the next is 67.9 as compared with 69, and that then there are the following 67.9, as compared with 75; 65.2 as compared with 71; 65.2 as compared with 70; 65.2 as compared with 70, and so on throughout the table, so that, taking
799 it as a whole, it shows that the Pennsylvania actually receives less than it would have received under a strictly mileage basis, the witness answered in the affirmative.

Asked whether he considered the divisions to which he has testified as being just and reasonable, the witness answered:

"I do, yes. By all the known method of making divisions, the New England lines today receive as much as they could reasonably expect to receive under a fair divisional basis."

Recross-examination:

Binghamton and Wilkes-Barre are points at which witness' line receives a very large amount of freight, interchanged, from the Erie at Binghamton and the Pennsylvania at Wilkes-Barre.

Witness does not believe that under present operating conditions they haul any through trains from Binghamton to Mechanicsville or from Wilkes-Barre to Mechanicsville. They are broken up at Oneonta, N. Y., half way between. They have done it from Binghamton. Witness doubts if they have ever done it from Wilkes-Barre. Those trains are turned over to the Boston & Maine at Mechanicsville. Witness' line hauls them into the Boston & Maine yards and leaves them there as trains. Witness does not understand that they do that from any point under their operating con-
800 ditions of today. Oneonta is a break-up yard and classification point. It is half way between Binghamton and Albany, on the main line. They haul solid trains from there to Mechanicsville, and turn them over to the Boston & Maine. The distance is about 80 miles.

Witness' understanding is that the company breaks up those trains at Oneonta, including those from Binghamton and Wilkes-Barre.

Witness' statement was that these divisions were fair, but that does not include any consideration of the needs of the Boston & Maine Railroad. He has made no investigation of the needs of the New Haven Railroad, or the cost of service, which may be the result of the peculiarly terminal characteristics of that road, and the diffusion of its traffic. He has just gone by the custom that miles ought to settle it. Witness believes that the present divisions are fair under the present Statute.

He has not investigated the cost of service on the Boston & Maine, or its revenue needs.

Witness has measured the divisions shown here by the customary way of making divisions; that is, the old yard stick, and that is all.

Recess until 2 P. M.

801 O. F. JOHNSON, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is general freight agent of the Lehigh Valley. He has heard the testimony given by Mr. Wright as to divisions through the Jersey City gateway. The only direct connection of the Lehigh Valley with New England is through the Harlem River gateway. In general, the history that Mr. Wright gave as to the Pennsylvania divisions describes the history of the Lehigh Valley divisions.

Witness has prepared a statement showing the prorating miles

compared with the actual miles as to the local interchange traffic between the New Haven and the Lehigh Valley.

The statement referred to is received in evidence and marked Defendants' Exhibit No. 83, Witness Johnson.

Asked to describe the significance of the exhibit, the witness said:

"This exhibit is to show the prorating miles allowed the New York, New Haven & Hartford to and from the various important points furnished by them; also the actual miles, and the difference between the two.

"I might, in this connection, briefly outline the groupings, to explain the exhibit. The New Haven, in connection with our line, is divided into five groups: The Hartford group, which gives
802 the New Haven a prorating mileage of 282 miles from all our groups, other than the Catasauqua group, from which group they draw 140 miles. The Holyoke group allows them a prorating mileage of 282 miles from all groups except Catasauqua and that is 240 miles. The Danbury group, Catasauqua, 260 miles; all other groups except Buffalo, 282 miles; Buffalo group, 332 miles.

"Boston group, 282 miles from all groups except Catasauqua and that is 260 miles.

"The Yarmouth group, 393 miles from all groups on that line.

"We have seven groups on the Lehigh. First, the Catasauqua group; prorating miles, 100; maximum actual, in group, 116 miles.

"Whitehaven, 150 miles, prorating; maximum, 147 miles.

"Scranton, 200 miles prorating; 197 miles maximum.

"Waverly, prorating 300; maximum, 320.

"Geneva, prorating 350; maximum, 355.

"Rochester, prorating 400; maximum, 420.

"Buffalo, prorating 452; maximum, 473.

"Now, out of those seven groups, from five of them we draw to the maximum point less than our actual miles, and in the other two only three miles in excess of actual miles."

Bethlehem, Pa., would be representative of a very heavy
803 tonnage, both as considered in and of itself, and as considered from the standpoint of the tonnage interchanged with the New Haven.

Bethlehem is 88 miles from Jersey City, for which witness' line draws a prorating mileage of 100 miles. To ansonia, Connecticut, the New Haven mileage is 79 miles, for which they draw 260 miles. Witness' line gets 12 miles more than the actual, and the New Haven gets 181 miles more than the actual. Witness can give any number of examples from this exhibit. The same is true of Group No. 2 on the exhibit. There is no large tonnage point in Group 2. Wilkes Barre is the large tonnage point in Group 3. The actual mileage is 177. 200 is the prorating mileage. That would show an excess to the Lehigh Valley of 23 miles, and the same excess to the New Haven road as given in the other example.

The New Haven's excess to these 48 points from witness' Group 2

would range from an excess of 62 miles to an excess of 248 miles over their actual mileage.

In every instance except one, the New Haven is securing divisions greater than a mileage prorate would produce for them. That is from these groups. The exception is Springfield, Massachusetts, in which case they draw 140 miles for a 100-mile haul; but there is very little business to Springfield, and the average to their
804 first Hartford group is much less than the distance.

In the light of the mileage test, the divisions impress witness as unduly liberal to the New Haven Road.

Witness has applied, in his study of the problem, not merely this straight mileage test which is illustrated by his exhibit, but also a 50-mile block plus a terminal. In general, the result of testing the New Haven's divisions with the Lehigh Valley by that standard shows that the New Haven at the present time are receiving much in excess of a 50-mile block basis with a 50-mile terminal for originating and delivering carrier. Witness' line is receiving correspondingly less than that.

Cross-examination:

Asked the reason for leaving his third group without any figures, except in the third line, the witness said:

"Oh, I should have explained that, Mr. Choate. From our Buffalo group to all groups on the New Haven, with the exception of their Danbury group, those figures are included in the second column; but on the Danbury group the New Haven draw 332 instead of 282 miles. In other words, from our Rochester group to Danbury we give them 282 miles, but from Buffalo they draw 332 miles. That is the one exception."

Witness could have repeated the figures, but they would
805 have been the same as the second group, except Wilson Point. It would probably have made it clearer if he had repeated it. Boston is probably as important a point as any one on that sheet interchanging with any of witness' three groups. Witness does not think that the selection of Boston and the figures in connection with it is a fair illustration of the whole sheet. Boston by itself does so much more business, but the percentage of the business to the Boston group for which the New Haven draws Boston mileage is much less. In other words, the New Haven to Ansonia, Naugatuck, Torrington, New Britain, Bristol and Waterbury, very heavy producing points, where their actual mileage is around 100, draw 282 miles.

This sheet does not cover coal.

Asked where he got his figure of 220 miles to Boston, witness said that it is based on the New York, New Haven & Hartford mileage, plus 13 miles for floatage, Harlem River to Jersey City. The steamer Maryland arbitratries, as originally established from witness" first group, were afterwards changed to 40 miles from their first group, Catasauqua, and to 60 miles on Boston. In the divisions

with the Lehigh Valley, the New Haven, so far as Boston is concerned, gets actual mileage plus 40 miles constructive mileage for the steamer Maryland, only on the first group. From the others they draw 62 miles.

806 Witness thinks that is very liberal for the reason that, as he explained, in the Boston group the New Haven have a great number of short haul points for which they draw the maximum mileage. In other words, their Boston mileage is applied down to the points which witness has previously mentioned, and which covers a large percentage of the actual shipments interchanged. Taking Boston, this witness regards the division as liberal, because he thinks 40 miles is a good allowance for any additional service which the New Haven performs. Witness' lines do part of the work of putting those cars on to the steamer Maryland at Jersey City. They have to be ferried across, taken off the float, and classified, and put into trains on the Harlem River side. That is all done on the Harlem River side.

Witness would not think that an actual mileage prorate including the float service would be liberal. He knows nothing about the cost of the steamer Maryland service, and has made no study of it. The allowance of 40 miles has been standard with the New Haven for a good many years. If talking about Boston proper, witness would not say that they were any too liberal, but his statement was in connection with the Boston group as a whole.

Witness got the mileage of 210 miles from Harlem River to Fitchburg from the New Haven mileage book. He does not know

807 through what points that moved to get to Fitchburg. There *is* 13 miles on that for float. On all those mileages shown there are 13 miles over the actual mileage from Harlem River. In order to move that freight over the New Haven rails, it would probably move from Harlem River to Mansfield, Massachusetts, and thence across to Fitchburg. Witness has no idea what the distance is via Mansfield. All lines, including the New Haven, publish and file their mileage tables with the Interstate Commerce Commission to show the mileage via different routes. Witness has selected the mileage he has put down here without regard to whether it was in actual use or not. That would not be fair in all cases, but there might be an exception like Fitchburg, here and there. Witness' line handles a very large quantity of cement from the Lehigh district. Some of it originates on his road, and it is taken down to the Harlem River. A good deal of it comes to witness' road from their connections. They are simply a bridge carrier at the Ohio River. The Ironton Railroad is the originating carrier of most of their cement. In quite a few instances, but not in all, it moves in solid trains. It is not delivered in solid trains at the steamer Maryland. It is delivered at Jersey City, but not in solid trains. It takes its turn. They have to run it into their Rock Island yard, break it up and handle it through the congested Jersey City territory to the

808 float bridges. It is delivered to the New Haven floats.

Witness could not say how much of the Lehigh Valley's interchange with the New England consists of that cement business.

The mileages on his Exhibit No. 83 do not apply to the handling of coal. That is one of the principal tonnages that his line interchanges with New England. Witness does not think that coal and cement together would constitute more than one-half of the Lehigh Valley total tonnage interchanged with New England. He would not want to guess whether it is about half. No individual item, except flour and grain, would be as large as either of these. The flour and grain interchanged would be considered quite heavy. Some of the grain is received from other carriers. As to most of it, witness' line is a bridge carrier. His line has a very heavy tonnage from Buffalo, of which it is the originating carrier. The balance is general merchandise. The principal tonnage received by witness' line from the New Haven is manufactured articles.

Witness presumes that this heavy tonnage that his line delivers to the New Haven, the latter has to peddle out through New England territory, with its connections. Witness would not say that his line handles this traffic in large units. He does not know whether it is more expensive to the New Haven.

809 Witness has not studied the New Haven costs or conditions under which this business is done, and has not studied the needs of the New England roads for revenue at all.

Redirect examination:

The mileage table referred to the witness does not show routes, but merely shows miles. It is the only official statement that witness knows of by the New Haven as to the freight mileage between these points. It simply shows the distance from a certain point, like Harlem River to Fitchburg. These are the distances witness has shown.

The Ironton Railroad is a little industrial switching track, about 10 to 15 miles long.

The cement plants which ship via witness' road are in some instances only 2 or 3 or 4 miles from the junction. The Lehigh Valley, as to that traffic, is not a bridge carrier at all. It has to furnish all the cars for the cement. It has to do the switching, to do the classifying, and all of the terminal service in connection with that carload traffic, except the little switching service which the Ironton Railroad does, and for which the Lehigh Valley pays it divisions. These divisions are 38 cents a ton that the Ironton Railroad is allowed on cement.

810 Witness would not say that most of the cement that the Lehigh Valley handles originates on the Ironton. They have a heavy movement from Copley and Cementon, on their road.

The bulk of the cement hauled by the Central Railroad of New Jersey and by the Lackawanna and the Lehigh & New England towards the New England carriers originates on an industrial road known as the Northampton & Bath. Those carriers, out of these divisions they receive on cement, have to pay an allowance to the industrial road for its switching service.

Recross-examination:

Witness' road gets very little cement from other roads than the Ironton Railroad. They may get some from the Lehigh & New England. They get very little from the Lackawanna Road. They get cement from Copley and Cementon on their own road, in considerable quantities.

WILLIAM S. KALLMAN, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is commerce assistant to vice-president, Traffic Department, New York Central Lines. His previous railroad experience covers 38 years, so far as the traffic connection with this case is concerned, from 1899. He was chief clerk, Official Freight Classification Committee, 1889-1896; assistant to Board of Managers,
811 Joint Traffic Association, 1896-1900; Secretary, Official Freight Classification Committee, 1900-1901; Chief of Tariff Bureau, New York Central Railroad and West Shore Railroad, 1901-1904; First Assistant General Freight Agent, New York Central Railroad and West Shore Railroad, 1904-1906; General Freight Agent, West Shore Railroad, 1906-1907; 1907-1920, Assistant Freight Traffic Manager, New York Central Lines, East Buffalo; also, during Federal control, member and Chairman of sub-committee, Eastern Region Freight Traffic Committee. 1920 to date, present position.

Practically all divisions of the New York Central Railroad and other lines have been investigated by witness, and studied from time to time, including the New England divisions.

In connection with this proceeding witness has made an investigation of the divisions of joint rates governed by the consolidated classification obtaining between the New York Central, including the Boston & Albany, and the other New England lines. What are known as percentages, or commonly known as mileage divisions, are used in dividing all joint rates between participating carriers, except rates on fresh milk and cream, buttermilk, condensed milk, pot cheese, coal and some low class short haul traffic, such as crushed stone, where one carrier or the other would feel
812 that the divisions of the low rates divided on basis of regular percentages would yield insufficient revenue. In such cases the arbitrary divisions apply; but those cases are not numerous.

Asked to state the results of his inventigation, the witness said:

"I would like to refer to Exhibit No. 56, introduced by the Witness Wood. It consists of a map and a statement attached to it, showing the groupings of the New Haven Railroad stations in the division of rates with the New York Central west of Buffalo and connecting lines. The map shows that the New Haven Road is divided into two groups, east and west of Willimantic and New London.

"The western group, indicated in red, is known as the New Haven percentage group, and the traffic to and from the group is interchanged via the Boston & Albany Railroad junctions at State Line, Pittsfield, Westfield or Springfield. The divisions are uniformly applicable via all four gateways.

"The routing of traffic via the several Boston & Albany Railroad junctions was fixed by the New York, New Haven & Hartford Railroad.

"The eastern group, indicated in blue, is known as the Providence percentage group. The junction points via which traffic to and from stations in the Providence group is interchanged with
813 the Boston & Albany Railroad are Worcester, Ashland and Framingham, Mass., the divisions being uniformly applicable via all three gateways. The routing of traffic via the several Boston & Albany Railroad junctions was fixed by the New York, New Haven & Hartford Railroad.

"The prorating distance received by the New Haven Railroad for its New Haven group is 321 miles, as against total prorating distance of 964 miles west of Boston & Albany Railroad junctions to Chicago, resulting in the New Haven Railroad receiving 25 per cent of the Chicago rates.

"The prorating distance received by the New Haven Railroad for its Providence group is 255 miles, as against prorating distance of 1,019 miles west of Boston & Albany Railroad junctions to Chicago, yielding the New Haven Railroad 20 per cent of the Chicago rates.

"The divisions now in effect were revised and the New Haven road's percentages increased in 1906. The agreement of that year contemplated that the prorating distances of 321 miles for the New Haven group, and 255 miles for the Providence group, would be used in the reconstruction or establishment of divisions with all other carriers in C. F. A. territory via the New York Central and Boston & Albany that would participate in divisions, and they were generally revised on that basis. So that these prorating distances broadly represent the basis of the percentages between the
814 New Haven road and all points in Central Freight Association territory via the Boston & Albany and New York Central Railroads.

"The statement attached to map 4, which is Exhibit 56, shows that the maximum actual distance from any Boston & Albany junction, from State Line to Pittsfield, inclusive, to any point in the New Haven group is 137 miles. That is the distance from State Line, Mass., to Port Morris, New York City. It follows that the prorating distance received by the New Haven Railroad of 321 miles is 184 miles in excess of the maximum actual distance from any Boston & Albany Railroad junction point to any New Haven station in the New Haven percentage group. Expressed otherwise, the prorating distance is approximately 234 per cent of the maximum actual distance.

"The same statement, No. 4, shows that the maximum actual distance from any Boston & Albany junction point, Worcester to Framingham, inclusive, to any New Haven station in the Providence

group is 129 miles, which is the distance from Framingham, Mass., to Provincetown, Mass., the end of Cape Cod.

"The New Haven Railroad, therefore, receives a prorating distance of 255 miles for a maximum actual distance of 129 miles, or 126 miles in excess of maximum actual distance; stated otherwise, the prorating distance is approximately 200 per cent of the maximum actual distance.

"The excess of the prorating distances above maximum actual distances between Boston & Albany Railroad junctions and the farthest points in the New Haven and Providence percentage groups does not fully indicate the liberality of the divisions to the New Haven Railroad, as the farthest points in the groups are not important traffic centers; and reference is had to a list furnished by Mr. J. E. Slater, witness for the New Haven Railroad, of 48 stations which were represented to be the stations handling the largest amount of received and forwarded tonnage, based upon the month of August, 1920."

An exhibit introduced by the witness at this point was received in evidence and marked Defendants' Exhibit No. 84, Witness Kallman.

The witness said:

"This exhibit is a statement showing the actual distance from each of the stations of the New York, New Haven & Hartford, designated by complainant's witness, Mr. J. E. Slater, as the stations handling the largest amount of received and forwarded tonnage, based on results for the month of August, 1920, to the several Boston & Albany Railroad junctions via which traffic is handled to and from points on the New York Central Railroad and connecting lines west of Buffalo, N. Y.; also showing the prorating distance received by the New York, New Haven & Hartford Railroad in the division of joint rates to and from points on the New York Central Railroad west of Buffalo and connecting lines.

"The stations are arranged alphabetically. It will be seen that the actual distance—there are only 46 points embraced in this statement. Mr. Slater's statement covered 48. Two of the points are Springfield and Worcester, which are omitted, to and from which there are no joint rates via Boston & Albany junctions.

"Taking the 46 points it will be seen that the actual distance from the junction point with the Boston & Albany via which the traffic is moved ranges from 10 miles in the case of Holyoke to 116 miles in the case of Port Chester, New York.

"It shows also, in column 4, the prorating distance and, in the last column, the excess of the prorating distance over the actual distance. The excess ranges from a minimum distance of 167 miles to a maximum of 311 miles over the actual distance.

"A further analysis of Mr. Slater's exhibit shows that, of the 46 points which are the principal traffic points of the New Haven road, 20 are located in the New Haven percentage group; that is, the group

west of Willimantic and New London. The average distance
817 from the 20 points to the Boston & Albany junctions via which the traffic is handled is 61 miles; the New Haven receiving a prorating distance of 321 miles of prorating mileage, or more than five times the actual distance.

"A further analysis of this exhibit shows that, of the 46 points referred to—principal traffic points—26 are located in the Providence percentage group. That is the group east of Willimantic and New London. The average distance from the 26 points to the several Boston & Albany junctions via which the traffic is handled is 40 miles, for which the New Haven Railroad receives a prorating distance of 255 miles, or more than six times the average actual distance."

Holyoke is a point having a very heavy tonnage of paper.

The witness continued:

"A better appreciation of this exhibit may, perhaps, be had by pointing out that for an average distance from its 20 principal traffic centers in the New Haven group to Boston & Albany Railroad junctions of 61 miles the New Haven Railroad receives 25 per cent of the Chicago rates, and for an average distance from 26 principal traffic stations in its Providence group to Boston & Albany Railroad junctions of 40 miles the New Haven Railroad receives 20 per cent of the Chicago rates.

"Another indication of the fairness of the divisions to the
818 New Haven road is submitted. In 1906 I ascertained from an examination of the Rand-McNally Atlas that at that time there were 137 places located on the New Haven road which, according to the latest census, had a population of 3,000 persons or more. I found that the average distance from those 137 stations to the Boston & Albany junctions via which the traffic was handled was 42 miles. For that 42-mile average service from those 137 places, the New Haven received prorating distances of 321 or 255 miles, according to the groups in which the stations were located.

"I would like to refer to Exhibit 52, which is an exhibit introduced by the Witness Wood for the complainants.

"Sheet No. 6 of this exhibit shows rates and divisions from Westerly, R. I., to Grand Rapids, Mich., via Worcester, Mass. The haul of the New Haven is 9.2 per cent. of the total distance, for which it receives 27.2 per cent. of the first class and 27 per cent. of the sixth class joint rates.

"Item 2, same sheet: From New Bedford, Mass., to Grand Rapids, Mich., via Framingham, the New Haven's haul is 5½ per cent. of the total distance, for which it receives 27.2 per cent. of the first class and 27 per cent. of the sixth class joint rates.

"Item 3: From Stamford, Conn., to Grand Rapids, Mich., via State Line, Mass., the New Haven's haul is 12.6 per cent. of the
819 total distance, for which it receives 27.2 per cent. of the first class and 27 per cent. of the sixth class joint rates.

"No other illustrations can be furnished from Exhibit No. 52,

because of its failure to show any other divisions of rates between the New Haven road and points on the New York Central west of Buffalo than to and from Grand Rapids, Mich., which with the New York Central is a branch line point.

"We come now to the divisions of joint rates between the New York, New Haven & Hartford Railroad and the New York Central Railroad, Buffalo and East, via Boston & Albany Railroad junctions.

"The only reference to divisions between the New Haven road and the New York Central Railroad via Boston & Albany junctions in the record as made by the complainants is contained in the testimony of Witness Wood, page 666, and in a few examples of divisions of joint rates between specific points contained in his Exhibit No. 52, sheet 3.

"In his testimony Mr. Wood said:

"'Joint rates and divisions have been in effect for years between New York, New Haven and Hartford Railroad stations and points on and reached via the New York Central Railroad, but records do not contain information covering the early years.

820 "'In June, 1906, the point of interchange, which was at Fishkill Landing, N. Y., was discontinued and new arrangements made for interchanging all of the traffic through the medium of the Boston & Albany Railroad. Divisions covering New York Central Lines East were revised on an arbitrary basis agreeable to all concerned at that time.'

"Mr. Wood is in error if he is to be understood as meaning that the interchange between the New York Central and the New Haven prior to 1906 was at Fishkill Landing, which is opposite Newburgh. There was an interchange there, but there was also, and for many years before that had been, a full line of interchange with the Boston & Albany. So, in 1906, all that was done was to abandon Fishkill Landing and concentrate the traffic at Campbell Hall.

"The divisions of rates between points on the New York Central Lines east of Buffalo and points on the New Haven Railroad via Boston & Albany junctions are on an arbitrary basis; that is to say, the divisions of all class and commodity rates are expressed in specific amounts per 100 pounds or per ton.

"Without going into the history of these arbitrary divisions, I can say that they were inaugurated by the New Haven road in 1895, and they were based upon the New Haven stipulating for fixed arbitrary divisions of all rates from all New York Central

821 points between Albany and Buffalo, regardless of the distance or the measure of rates involved.

"They stipulated for the same divisions. In the first place, they stipulated for percentages of the Buffalo rates that would yield them in cents per 100 pounds the same revenue that they were then securing on Chicago traffic. They then stipulated that the divisions of the rates east of Buffalo should be no less for the New Haven than they got on the Buffalo rates, as far east as Albany.

"In 1903, the arrangement was modified so that, as rates then existing were increased or decreased, the divisions of the New Haven road were increased or reduced on a pro rata basis, and the arrange-

ment was then extended to cover other divisions and branches of the New York Central Lines East of Buffalo.

"The existing divisions are numerous and complex, and an analysis of all of them would require considerable time. As illustrative of the liberality of the divisions to the New Haven road, reference is had to Witness Wood's Exhibit No. 52, sheet 3.

"Sheet 3 shows that in the division of first and sixth class rates from Westerly, R. I., to Rochester, N. Y., via Worcester and Boston & Albany Railroad and New York Central Railroad, the New Haven's haul is 19.10 per cent. of the total distance, for which it
822 receives 32.6 per cent. and 33.5 per cent. of the first and sixth class joint rates.

"From New Bedford, Mass., to Rochester, N. Y., via Framingham, the New Haven's haul is 11.6 per cent. of the total distance, for which it receives 32.6 per cent. of the first class and 33½ per cent. of the sixth class joint rates.

"From Stamford, Conn., to Rochester, N. Y., via State Line, Mass., the New Haven's haul is 29.8 per cent. of the total distance, for which it receives 40 per cent. of the first class and 39.9 per cent. of the sixth class joint rates.

"From Westerly, R. I., to Syracuse, N. Y., via Worcester, the New Haven's haul is 22.5 per cent. of the total distance, for which it receives 34.1 per cent. of the first class and 33½ per cent. of the sixth class joint rates.

"From New Bedford, Mass., to Syracuse, via Framingham, the New Haven's haul is 13.8 per cent. of the total distance, for which it receives 34.1 per cent. of the first class and 33½ per cent. of the sixth class joint rates.

"From Stamford to Syracuse via State Line, the New Haven's haul is 36.9 per cent. of the total distance, for which it received 42.1 per cent. of the first class and 39.9 per cent. of the sixth class joint rates.

"From Westerly, R. I., to Buffalo, N. Y., via Worcester, Mass., the New Haven's haul is 16.3 per cent. of the total distance, for
823 which it receives 33.3 per cent. of the through rates.

"From New Bedford to Buffalo, via Framingham, the New Haven's haul is 9.9 per cent. of the total distance, for which it receives 33.3 per cent. of the through rates.

"From Stamford to Buffalo via State Line the New Haven's haul is 24½ per cent. of the total distance, for which it received 41.7 per cent. of the through rates.

"In further illustration of the liberality of the divisions between the New Haven and the New York Central, Buffalo and East, I would like to submit an exhibit (producing same)."

The statement introduced at this point by the witness was received in evidence and marked Defendants' Exhibit No. 85, Witness Kallman.

The witness continued:

"This is a statement showing the actual distance from each of the 46 principal traffic centers covered by Witness Slater's exhibit,

based on the results of the month of August, 1920, to the several Boston & Albany Railroad junctions via which the traffic is handled to and from points on the New York Central Railroad, Buffalo and East thereof; also showing the total distance between each of such New Haven stations and the following stations on the New York Central, namely, Utica, Syracuse, Rochester and Buffalo, N.
824 Y.; also showing the percentage of the New Haven haul to the total distance and the average percentage of existing sixth class rates accruing to the New Haven.

"This statement is arranged alphabetically as to the New Haven stations.

"It will be seen that the percentage of the New Haven road's haul from various of the 46 stations to the Boston & Albany junction via which the traffic is handled ranges from a minimum, in the case of Utica, of 5.1 per cent. to a maximum of 44.9 per cent.; and the average percentage of the sixth class rates that the New Haven Railroad receives for that service ranges from 33⅓ to 39.8 per cent. It is 46.4 at Port Chester, State Line,—in the case of Utica.

"Taking Syracuse, the percentage of the New Haven's haul to the total haul via the Boston & Albany junctions, via which the traffic is handled ranges from a minimum of 4 per cent. to a maximum of 38.3.

"The New Haven, for those hauls, receives from 33⅓ to 39.8 per cent. as an average of the sixth class rates.

"Taking Rochester, the percentage of the New Haven haul to the various Boston & Albany junctions, in proportion to the total haul, ranges from a minimum of 3 per cent. to a maximum of 30.3 per cent., for which it receives from 33⅓ to 39.8 per cent. as an average of the sixth class rates.
825 "Taking Buffalo, the percentage of the New Haven haul of the total haul ranges from a minimum of one per cent to a maximum of 25.7 per cent, for which it receives either 33⅓ for stations in its eastern group, the Providence group, or 41.66 per cent for stations located in the Western or New Haven group."

The New Haven gets that 41.66 per cent on the one per cent of the total haul in that particular case, all stations being in two groups, New Haven and Providence.

The witness continued:

"I want to refer now to Exhibit No. 59, introduced by the witness Wood. It consists of a map showing the grouping of the New Haven stations in the division of rates with the West Shore Railroad via Campbell Hall, N. Y., and the statement attached to it shows the percentages and actual distances.

"The percentages shown in the statement attached to map No. 59 are not based upon the actual distances between the junction points and the farthest points in the two New Haven percentage groups and the one West Shore percentage group. The percentages in force were those that were used prior to 1904, when traffic was interchanged via Newburgh and Fishkill Landing by car ferry, and in-

cluded a constructive distance on 25 miles for the New Haven road. When the interchange was transferred from Newburgh to Campbell Hall, the percentages were not changed.

826 "It will be seen from the map that the New Haven road is divided into two groups, namely, the Boston group and the Provincetown group, and the maximum distances from Campbell Hall to Boston and Provincetown are 256 and 348 miles, respectively, as compared with maximum distance from Campbell Hall to Jersey City of 126 miles. The West Shore group extends from Jersey City to, but not including, Albany.

"The liberality of these divisions to the New Haven road is shown by the percentages themselves; the New Haven receiving 63.9 per cent of joint rates to and from all stations east of Campbell Hall in the Boston group, as compared with 36.1 per cent for the West Shore and 70.5 per cent for all stations in the Provincetown group, as compared with 29.6 per cent for the West Shore Railroad.

"I would like to analyze further Mr. Wood's Exhibit No. 52. In his testimony Mr. Wood, at page 666, was asked:

"'Q. Now, have you prepared, Mr. Wood, sheets showing the divisions from typical points in New Haven territory to points in Trunk Line and C. F. A. territory?

"'A. I have.'

"Mr. Wood then introduced Exhibit No. 52, comprising 17 sheets. This exhibit shows, among others, class rates and divisions between Boston and Fall River, Mass., Hartford and Winsted, Conn., and Poughkeepsie, N. Y., on the one hand, and Youngstown, Cleveland and Cincinnati, Ohio, Detroit and Grand Rapids, Mich., In-

827 dianapolis, Indiana, Chicago, Ill., Louisville, Ky., and St. Louis Mo., on the other hand.

"None of the typical illustrations of rates and divisions between these points is shown via the Boston & Albany-New York Central route, with the single exception of rates between the New England points named and Grand Rapids, Mich. Inasmuch as Cleveland, Detroit and Chicago are directly located on the New York Central, a possible reason for the ommission of illustrations of rates and divisions between these points may be found in the fact that they showed more favorably to the New Haven than the New Haven road wanted them to appear.

"The liberality to the New Haven Railroad of the divisions of class rates between Westerly, R. I., New Bedford, Mass., Stamford, Conn., and Grand Rapids, Mich., via the Boston & Albany route is shown by the exhibit and has already been testified to.

"The only other divisions between New Haven Railroad stations and New York Central stations shown in Exhibit No. 52 are between Westerly, New Bedford and Stamford, on the one hand, and Syracuse, Rochester and Buffalo on the other hand, via the Boston & Albany route. The liberality of the divisions of the rates between these points is shown in the exhibit and has already been covered in previous testimony.

"It cannot, therefore, be claimed that Exhibit No. 52 con-
828 tains typical or representative divisions of class rates between principal points on the New Haven road and principal points on the New York Central Railroad west of Buffalo.

"Mr. Wood's exhibits 52, 56 and 60 are the only exhibits showing divisions of rates between points on the New Haven Railroad and points on the New York Central Railroad, including the West Shore Railroad.

"These exhibits show, first, divisions between the entire New Haven Railroad and the Chicago group of the New York Central Railroad; second, the divisions between the entire New Haven Railroad and the West Shore Railroad between Jersey City and Albany, N. Y.; third, divisions between a few selected New Haven railroad stations and Syracuse, Rochester, Buffalo, New York, and Grand Rapids, Mich., via Boston & Albany Railroad junctions.

"These exhibits are not typical of other divisions existing between the New Haven Railroad and the New York Central Railroad, except to the extent that they show the constructive distances received by the New Haven road in excess of maximum actual mileages.

"There are in effect divisional arrangements between points on the New York Central and the New Haven road as follows:

829 "First, between all New York Central points west of Albany and New Haven Railroad via Boston & Albany junctions.

"Second, between points on the Hudson Division of the New York Central, south of Albany, via Beacon and Port Morris.

"Third, between points on the New York Central west of Buffalo, on the one hand, and New Haven stations, Pittsfield, Westfield, Springfield, Worcester and Framingham, Mass., via Beacon, N. Y.

"There are also in effect numerous divisional arrangements between various carriers in C. F. A. territory, including all New York Central System lines and the New Haven Railroad via New York Central Railroad and Boston & Albany Railroad, and with respect to these divisional arrangements the exhibits of the New Haven Railroad are not typical, except in so far as they show the uniformity of the prorating distances of the New Haven road.

"There are also in effect numerous divisional arrangements between the Michigan Central Railroad, Pere Marquette Railroad, Wabash Railroad, Grand Trunk Railway, New York, Chicago & St. Louis Railroad and their various connections in C. F. A. territory, on the one hand, and the New Haven Railroad, on the other hand, applicable via the New York Central and Boston & Albany Railroads, with respect to which the New Haven Railroad exhibits are not typical, with the same qualification as to the prorating dis-
830 tances of the New Haven road.

"The divisional arrangements that were reconstructed with the New Haven Road in 1906 necessitated the revision of all of the divisions covering all roads in C. F. A. territory, including all New York Central System lines which then participated in divisions via the Boston & Albany and New York Central route. I personally

handled those for the New York Central, practically all of them, and from my knowledge of them and recollection, I can say that, generally speaking, the terminal carriers in C. F. A. territory accepted prorating distances which represented the maximum actual distance from their junction points to the farthest points in the various groups. True, the size of the groups varied, but, with few exceptions, the prorating distances represented the maximum actual distance for the group. The exceptions would be where short lines would be involved, having only short hauls, and where a straight mileage prorate would yield them inadequate revenue. In such cases they would usually be allowed a minimum percentage.

"Independent of these divisions with the New Haven Road that I have just testified to, what I have just said is true generally of all divisions between C. F. A. lines via all New England lines and all trunk lines, as to the generality of the practice of making the prorating distance correspond with the maximum actual distance
831 for the group.

"I would like to take up now the divisions between the Boston & Maine and the New York Central.

"Taking up Exhibit No. 42, Witness G. H. Eaton, Sheet 29, it shows percentage divisions and bases thereof between various Boston & Maine Railroad percentage groups and New York City, via Troy and the New York Central Railroad. Sheet 29 erroneously shows the prorating mileage of the New York Central between Troy and New York City as 146 miles. The prorating distance is 148 miles. The actual distance between Troy and St. John's Park, New York City, is 150 miles.

"Sheet 29 shows the percentages of the New York Central Railroad are not based upon constructive distances, the prorating mileage being 148 miles, whereas the Boston & Maine's percentages are based upon constructive distances ranging from 4 miles, in the case of the Boston group, to 133 miles, in the case of the East Jaffrey group, in excess of the actual distances between Troy and the farthest points in the several groups.

"Sheet 29 indicates that the Boston & Maine receives a terminal deduction of 2 cents before prorating joint rates between stations in its Millers Falls percentage group and New York City, which is in error. It receives no terminal allowance for the Millers Falls group.

832 "Sheet 29 would indicate that the Boston & Maine receives a terminal allowance of 2 cents before prorating joint rates between all of its stations, except the Millers Falls group, and New York City. The only agreed terminal allowance is one cent per 100 pounds, and I will deal with that separately later.

"Sheet 29 indicates that the New York Central receives a terminal deduction of 2 cents or 4 cents before prorating joint rates with the B. & M., via Troy. The 2-cent terminal allowance is applicable to rates applying to and from rail terminal stations of the New York Central at New York City. The 4-cent terminal deduction applies to rates to and from pier stations, which involve lighterage or floatage service, to and from the rail terminals at New York City. These

terminal deductions, when established as between the New York Central and the Boston & Maine, in 1900, were intended to partly compensate the New York Central for the exceptional terminal expenses at New York City stations. They have not since been changed. The costs meanwhile, have materially increased.

"Upon examination of Sheet 29, it will be seen that the prorating distance of the Boston & Maine vary from 4 miles, in the case of the Boston group, to 133 miles in the case of the East Jaffrey group, in excess of the maximum actual distance from Troy to the
833 farthest point in the groups; whereas the New York Central's prorating distance does not exceed its actual maximum distance.

"Sheet 33 of the same exhibit, No. 42, shows percentages and bases thereof, as between various percentage groups of the Boston & Maine and the Syracuse, Rochester, and Buffalo percentage groups of the New York Central, via Rotterdam Junction.

"Sheet 33 erroneously shows the actual distance of the New York Central between Rotterdam Junction and Syracuse as 119 miles. That is the distance of the West Shore Railroad. The actual distance of the New York Central, Rotterdam Junction to Syracuse, is 126 miles; hence, the sheet erroneously shows that the New York Central's prorating distance is 7 miles more than actual.

"Sheet 33 erroneously shows the actual distance of the New York Central between Rotterdam Junction and Rochester as 200 miles. That is the distance of the West Shore Railroad. The actual distance of the New York Central between Rotterdam Junction and Rochester is 204 miles. Therefore, the New York Central prorating distance is only 3 miles in excess of the actual distance.

"Sheet 33 erroneously shows the New York Central's actual distance between Rotterdam Junction and the Buffalo group as
834 267 miles; that is the West Shore Railroad distance. The Buffalo group of the New York Central extends beyond Buffalo to Echota, N. Y., one mile east of Niagara Falls; the distance from Rotterdam Junction to Echota is 277 miles, which is the prorating distance of the New York Central for the Buffalo group. Therefore, this exhibit erroneously shows the New York Central prorating distance as being 10 miles in excess of the actual distance.

"Sheet 33 erroneously indicates the Boston & Maine receives a terminal deduction of 2 cents before prorating joint rates to and from its Millers Falls group. There is no terminal deduction for the Millers Falls group of the Boston & Maine.

"Sheet 33, as it should be corrected, shows that while the New York Central prorating distances for its Syracuse and Buffalo groups are its maximum actual distances, and while its prorating distances for its Rochester group are 3 miles in excess of its actual distance, the prorating distances of the Boston & Maine in excess of its maximum actual distance range from 3 miles, in the case of the Boston group, to 133 miles, in the case of the East Jaffrey group. This sheet also indicates that the Boston & Maine receives a terminal deduction of 2 cents before prorating the joint rates to and from all

stations except points included in the Boston and Boston ex-
835 port percentage groups. The only agreed terminal allowance is one cent per 100 pounds.

"An examination of the map attached to Sheet 33 shows that in addition to the use by the Boston & Maine Railroad of constructive prorating distances in excess of maximum actual distances between the junction points and the farthest points in its several groups, that company has further increased its revenue by the groupings of its stations into large groups and attaching thereto prorating distances greater than those accepted for parallel or adjacent lines. The following examples are cited:

"For stations on the Worcester, Nashua and Portland Division, extending north of Worcester, through Ayer, Mass., Epping, and Rochester, N. H., to Deering Junction, Me., and for its lines extending from North Cambridge and North Somerville, Mass., which points are adjacent to Boston, to Nashua, the Boston & Maine prorating distance is 359 miles east of Rotterdam Junction, while, for its several lines and branches extending between Boston and Portland, which are largely adjacent to or parallel with its line extending north of Worcester, North Cambridge, and North Somerville, to Deering Junction, the Boston & Maine prorating distance is 329 miles when, as a matter of fact, the maximum actual distance is only 281 miles.

836 "For stations in the Concord group, east and south of Ayer, Mass., and Nashua, N. H., to Boston, the Boston & Maine prorating distance is 359 miles, while for adjacent stations on the Fitchburg division, extending from Ayer to Boston, the prorating distance is 212 miles.

"It has simply occurred that when the Boston & Maine Railroad leased the Fitchburg Railroad, in 1900, they took the prorating distances of the two roads and added them together, a very simple and effectual method.

"To illustrate that hypotenuse of the triangle, the prorating distance of 320 miles east of Rotterdam Junction to Portland was made up of 212 miles of the old Fitchburg Railroad distance, Rotterdam to Boston, plus the Boston & Maine distance of 108 miles to Troy. I apprehend that shortly after the consolidation, or the absorption of the Fitchburg—anyhow, for years before the traffic has been handled through Ayer, and the distance via that junction point is 281 miles; nevertheless, throughout all these years, they got 320 miles as the Portland prorating distance.

"For stations on the southern division of the Boston & Maine—and that is what was formerly called the Central Massachusetts—extending from Northampton to Boston, indicated by the red line on the map, a line paralleling the Fitchburg division, the minimum distance from Rotterdam Junction is 125 miles, the first
837 station east of Northampton. The distance to Boston via that division is 225 miles. For that block the Boston & Maine Railroad prorating distance is 359 miles. If we consider this division by itself, the Boston & Maine receives a prorating distance

of 138 miles in excess of the maximum actual distance, as compared with 212 miles for stations on its parallel Fitchburg division east of Athol, Mass., to Boston.

"For stations on its Connecticut River division, extending from Greenfield to Bellows Falls, Vt., and Keene, N. H., the minimum distance from Rotterdam Junction is 110 miles, and the maximum distance is 151 miles. The B. & M. prorating distance is 268 miles. That is the line shown in purple. For stations in its Fitchburg division—this gray line, extending north of Worcester, through Gardiner, Winchendon and Keene to Bellows Falls (indicating)—the Boston & Maine accepted a prorating distance of 212 miles for a line which lies materially east of the line extending from Greenfield to Bellows Falls and Keene.

"For stations on its Connecticut River division south of Greenfield to Springfield, the purple line, the minimum distance is 107 miles from Rotterdam Junction; the maximum is 138 miles. The Boston & Maine prorating distance is 268 miles, while, for stations on the Fitchburg division, extending from Athol to Boston,
838 the whole line being materially east of the line from Greenfield to Springfield, the B. & M. prorating distance is 212 miles.

"The B. & M. prorating distance from Rotterdam Junction to Portland was originally established and is still maintained on the basis of the Fitchburg Railroad distance from Rotterdam Junction to Boston, of 212 miles, plus 108 miles from Boston to Portland. As I have already said, traffic to and from Portland has for years been handled through Ayer Junction, and via that junction the actual distance is 281 miles.

"To further illustrate the methods by which the Boston & Maine has increased its revenue by arranging its percentage groups of stations so as to include important traffic centers in groups for which large constructive distance have been used, I would like to submit an exhibit."

A statement introduced by the witness at this point was received in evidence and marked Defendants' Exhibit No. 86, Witness Kallman.

The witness continued:

"This exhibit is a statement showing the actual distances from Rotterdam Junction to each of the 30 stations of the Boston & Maine Railroad designated by Complainants' witness, Mr. G. H. Eaton, as the most important stations to and from which traffic is re-
839 ceived and forwarded from and to points in Trunk Line and C. F. A. territories in the order of their importance; also to show the prorating distance received by the Boston & Maine Railroad in the division of rates to and from points on the New York Central and the connecting lines via Rotterdam Junction. Column 1 shows the names of the stations as to inbound traffic, arranged in the order of importance. Column 2 shows the actual distance from each of the stations to Rotterdam Junction. Column 3 shows the prorating distance received by the Boston & Maine. Column 4

shows the excess of the prorating distance over the actual distance. Taking column 4 it will be seen that the excess of the prorating distance over the actual distance ranges from 3 miles, in the case of Boston, as a minimum, to a maximum of 189 miles, in the case of Claremont, N. H. The fifth column shows the names of the stations, arranged in the order of their importance, with reference to outbound traffic. The sixth column shows the actual distance from the point named in column 5 to Rotterdam Junction. The seventh column shows the prorating distance received by the Boston & Maine; and the eighth column shows the excess of the prorating distance over the actual distance. The excess is from 3 to 189 miles above the prorating distances.

"These stations, it will be noted, are arranged, according to Mr. Eaton's arrangement, in the order of their importance as to
840 traffic. It can be seen how much excess prorating distance the Boston & Maine receives over the actual distance for the stations, according to the importance of each as a traffic center in the consideration of the Boston & Maine Railroad."

The witness continued:

"Again referring to Mr. Eaton's Exhibit No. 42, sheet 36, this again indicates the Boston & Maine is allowed a terminal of 2 cents, when the only agreed terminal allowance is one cent. This sheet shows the Boston & Maine's percentages are based upon constructive distances. I should have said, in the first place, it shows rates and divisions between various B. & M. percentage groups and the following groups in Central Freight Association territory: The Chicago group of the New York Central; the St. Louis group of the C. C. C. & St. L.; the Indianapolis group of the same road; the Cleveland group of the New York Central; the Grand Rapids group of the Michigan Central; and the Cincinnati group of the C. C. C. & St. L. This shows that the prorating distances of the Boston & Maine are from 3 to 132 miles in excess of the maximum actual distance to or from Rotterdam Junction, while the excess of the prorating distance west of Rotterdam Junction over actual distance does not in any case exceed 15 miles.

841 "In the comparisons shown in Sheet 1 of Exhibit 43, covering rates and divisions between New York State and points on the Boston & Maine, the following points on the Boston & Maine were selected: Johnsonville, N. Y.; Keene, N. H.; Fitchburg, Mass.; Boston, Mass.; Portland, Me.; St. Johnsbury, Vt., which points were testified to by Mr. Eaton as having been selected as typical points within the various B. & M. division prorating groups. Considering these points from the standpoint of their traffic importance, according to the list furnished by Mr. Eaton, they appear in the following order: Inbound traffic; Boston, 1st; Fitchburg, 12th; Concord, 24th; Portland, 11th; Keene, 29th; St. Johnsbury, 27th; Johnsonville, not shown. Outbound traffic, Boston, 1st; Fitchburg, 12th; Concord, 11th; Portland, 21st; Keene, 23rd; St. Johnsbury, 27th.

"It should be noted that of the points selected in Sheet 1, Boston and Portland are the farthest points in the Boston and Portland

groups from the junction points. Concord does not represent the Concord percentage group, from the standpoint of traffic importance, Manchester being a more important point. Johnsonville is a point of small importance compared with such a point as North Adams, which is a manufacturing center, and midway in the group.

"I will now take up Sheet 10. Portland is not a typical
842 point in the Portland group, it being the end of the group, and of materially less commercial importance than many other manufacturing communities located in the group, such as Lawrence or Lowell. Concord is not as typical a point in the Concord group as Manchester would be, considered from the standpoint of traffic importance.

"With regard to Sheet 11, Keene is not a typical point in the Windsor group, considered from the standpoint of traffic importance, it being listed by the Boston & Maine as 29th in importance on inbound and 23rd in importance on outbound traffic. Johnsonville is a point of no commercial importance compared with other points in the Millers Falls group, such as North Adams.

"With regard to Sheet 13, St. Johnsbury, the point selected for this exhibit, is listed by the Boston & Maine as 27th in traffic importance, both inbound and outbound.

"With reference to Sheet 16, Portland is not a typical point in the Portland group, it being the end of the group, and of less commercial importance than many other manufacturing communities in that group, such as Lawrence or Lowell. Concord is not as typical a point as Manchester. St. Johnsbury is listed by that company's witness as 27th in traffic importance, both inbound and outbound traffic.

"With regard to Sheet 17, of the points selected by the
843 Boston & Maine for the comparisons shown, namely, Greenfield and Haverhill, Mass., North Conway, N. H., and Sherbrooke, Quebec, none is shown in the list of 30 Boston & Maine points as considered in the order of traffic importance.

"By reference to Sheets 29, 33 and 36, it will be observed that whereas the Boston & Maine's prorating distances are from 3 to 133 miles in excess of the maximum actual distances between its actual junction points and the farthest points in its various percentage groups, the prorating distances of the New York Central in excess of its maximum actual mileages from its junction points to the farthest points in the percentage groups exist in only two instances; one, in the case of the Rochester group, the excess being 3 miles; and the second in the case of the Chicago group, the excess being 5 miles.

"We come now to the consideration of the terminal allowance of one cent per 100 pounds or two cents per 100 pounds, as now in controversy. Before we come to that, I want to make this comment on the terminal allowance. In the consideration of the reasonableness of the divisions between the Boston & Maine and the New York Central Railroad and connecting lines, it should not be overlooked that with the exception of stations on its Fitchburg division, the

Boston & Maine receives a terminal deduction of one per cent
844 per 100 pounds, or 20 cents per ton, on all traffic except coal, before rates are divided on basis of prorating distance, which terminal allowance is in all cases in addition to various constructive distances in excess of actual mileages for the Boston & Maine Railroad.

"Attention is called to Witness Eaton's testimony, pages 817 and 818 of the record, wherein he conceded that if the terminal deduction exists at one end of the line, it should be allowed at the other end. I think it would be difficult to justify the same terminal deduction at small stations and large cities. There are divisional arrangements in effect between the Boston & Maine Railroad, on the one hand, and the New York Central; also between the Boston & Maine Railroad on the one hand and the Michigan Central, Wabash, and various carriers in C. F. A. territory, all applying via Bellows Falls, Vt., Rutland Railroad, and Norwood, with respect to which the divisions of rates between the Boston & Maine and the New York Central and connecting lines via Rotterdam Junction are not in any way typical or representative.

"Divisions of rates between the Central New England Railway and the New York Central Railroad and connecting lines via Beacon, New York, will be considered next. Witness Wood's Exhibit
845 No. 56, map 4, and statement attached thereto, showed the grouping of stations of the C. N. E. Railroad and the prorating distance and the actual mileages applicable to the division arrangements in connection with the New York Central Chicago group. Map 4 shows that the stations of the C. N. E. are embraced in one group, the line being shown in green color, the group being known as the Hartford percentage group. A statement attached to Map 4 shows that the prorating distance allowed the C. N. E. is 232 miles, yielding that company 20.2 per cent. of Chicago rates. The minimum and maximum distances from Beacon and points in the Hartford group are two and 129 miles respectively. Therefore, the prorating distance allowed the C. N. E. is slightly in excess of 200 per cent. of the maximum and actual distance, while the prorating distance west of Beacon is shown as materially less than actual distance. The figures themselves show the liberality of the divisions.

"The C. N. E. is allowed a prorating distance of 232 miles for other groups of the New York Central west of Buffalo. Therefore the divisions for the C. N. E. to the Chicago group of the New York Central may be regarded as representative of the divisions covering all of the New York Central west of Buffalo.

"Divisions between the C. N. E. and the New York Central, Buffalo and east, are not upon the same basis as the divisions cover-
846 ing the New York Central west of Buffalo. Therefore the divisions in the latter case are not typical of the divisions covering the line east of Buffalo.

"Wood's Exhibit No. 52, sheet 3, shows rates and divisions from Winsted, Conn., to Syracuse, Rochester and Buffalo, via Beacon. The following illustrations of the liberality of those divisions are pointed out:

"First, in the division of Winsted-Syracuse rates, via Beacon, the C. N. E. haul is 28.4 per cent. of the total distance, for which it receives 35 per cent. of the first and sixth class joint rates.

"Second, in the division of Winsted-Rochester rates, the haul of the C. N. E. is 19.4 per cent. of the total distance, for which it receives 33.3 per cent. of the first and sixth class rates.

"Third, in the division of Winsted-Buffalo rates, the haul of the C. N. E. is 17.4 per cent. of the total distance, for which it receives 30 per cent. of the first and sixth class joint rates.

"Divisions as between the New York Central Railroad and the Maine Central Railroad are next on the list for consideration. Witness Hobbs testified in substance as follows, at pages 580 to 583:

First, that there are joint through rates in effect between
847 points in Trunk Line territory, on the one hand, and points on the Maine Central Railroad east of Portland, to and including Brunswick, Bath, Lewiston, Mechanic Falls, and Rockland, Me., on the other hand; also covering the entire mountain division, extending from Portland to Lime Ridge, Quebec, and in the division of such rates the Main Central is allowed a terminal deduction of one cent, claimed as 2 cents per 100 pounds, and the balance of revenue is divided on a prorating distance of 117 miles for the Maine Central Railroad.

"Second, that there are joint through rates in effect between points in C. F. A. territory on the one hand and points on the Maine Central Railroad in the Rockland group as just described; also to and from points in the so-called Ellsworth group, extending east and north of Brunswick, Lewiston, and Mechanic Falls, to Rumford, Farmington, Norridgewock, Scowhegan, Harmony, Dover-Foxcroft, Milford, including Bangor, Belfast, Bucksport, and Mt. Desert Ferry, and that in the division of such rates the Maine Central receives a terminal allowance of one cent (claimed as 2 cents per 100 pounds), and the balance of the revenues is divided on a prorating distance of 179 miles for the Maine Central Railroad.

"Third, that the prorating distance for the Rockland group is based upon a distance of 86 miles from Portland to Rockland, plus an allowance of substantially 30 miles for the Bath car
848 ferry.

"Fourth, that the prorating distance allowed the Maine Central Railroad for the Ellsworth group is based upon actual distance, Portland to Mt. Desert Ferry.

"Fifth, that the actual distance from Portland to Lime Ridge, the terminus of the mountain division, is 208 miles.

"Sixth, that traffic between points in Trunk Line territory and points east of the Rockland group is transported under rates applicable to or from Brunswick, plus local or proportional rates of the Maine Central Railroad east thereof.

"Seventh, that traffic to and from points in C. F. A. territory and points on the Maine Central Railroad east of the Ellsworth group is transported under joint rates applicable to or from the ends of the Ellsworth group, plus the local or proportional rates of the Maine Central Railroad beyond."

A map introduced by the witness at this point was received in evidence and marked Defendants' Exhibit No. 87, Witness Kallman.

The witness continued:

"This map shows the Rockland group in blue and the Ellsworth group in red. The stations that are not colored are stations of the Maine Central to and from which there are not, generally
849 speaking,—in fact, with very few exceptions—joint rates with connecting railroad.

"According to information furnished me by Mr. Hobbs, the Boston basis of rates was extended east of Portland to and including Brunswick and Lewiston, via the differential (Canadian) routes in 1897; via standard (Trunk Line) routes in 1900; and was extended to Rockland, Me., in 1905, and again extended to include the Ellsworth group in 1907 and 1908. Taking the map and Mr. Hobbs' testimony together, the following points are presented:

"The Rockland prorating distance, as applied to stations east of Portland, to Rockland, includes a constructive distance of 30 miles, as an allowance to the Maine Central for a car ferry operating at Bath, Me., which is a liberal allowance for a car ferry of such short length as that, compared with the Harlem River allowance of 60 miles for a 13-mile floatage service. The distance of this car ferry is about a mile.

"While the distance from Portland to Lime Ridge is 208 miles and the stations of the mountain division of the Maine Central are subject to Rockland divisions, which are supposed to be based on 117 miles, it must not be inferred that traffic to and from the mountain division from and to points in Trunk Line and C. F. A. territory is hauled via Portland, or that the Maine Central performs a
850 service of 208 miles for a prorating distance of 117 miles. The traffic to and from the mountain division is interchanged with the Boston & Maine at one or the other of three junctions, namely, Portland, Me., Intervale, or Coos Junction, N. H. The maximum distance from Rotterdam Junction to Lime Ridge, via Coos Junction, is 368 miles, for which a double prorating distance east of Rotterdam Junction of 437 miles is allowed. The Maine Central's distance from either of the three junctions named to stations on its mountain division is less than 100 miles.

"When the Boston basis of rates was extended to include points in the Ellsworth group, which group is shown colored in red on the map, the Maine Central not only demanded the maximum distance from Portland to Mt. Desert Ferry as a prorating distance, of 179 miles, but it included in the Ellsworth group widely separated branches as taking the same prorating distance. The distances from Portland to the farthest points on the several branches of the Ellsworth group are as follows: To Rumford, 86 miles; to Farmington, 84 miles; to Norridgewock, 96 miles; to Scowhegan, 100 miles; to Harmony, 120 miles; Dover and Foxcroft, 139 miles; Milford, 150 miles; Bucksport, 156 miles; Belfast, 129 miles.

"When the Ellsworth group was created, it would have only been fair for the Maine Central to include in the then existing

851 Rockland group all points east and north of Brunswick and Lewiston that were within 117 miles of Portland, and then to include in the Ellsworth group stations of greater distance extending to Mt. Desert Ferry.

"With respect to traffic between points in Trunk Line territory and points east and north of the Rockland group, I would like to make a clear distinction, if you please, Mr. Examiner, as between Trunk Line territory on the one hand and Maine Central on the other, and C. F. A. territory on the one hand and Maine Central on the other. Between Trunk Line territory and points on the Maine Central east of Brunswick and Lewiston, there are no joint rates. Traffic is handled on the basis of the Maine Central collecting whatever local or proportional rates it elects east of Brunswick. Traffic is then handled on joint rates to or from Brunswick and on the basis of a prorating distance of 117 miles, for a service of 30 miles between Brunswick and Portland, first taking out a terminal of one cent on traffic which passes through Brunswick and merely enjoys the scenery.

"On traffic between points in C. F. A. territory and points on the Maine Central east of the Ellsworth group, shown in red, there are no joint rates. The traffic is handled on combinations of rates to and from the Ellsworth group junction points, such as the
852 Maine Central elects to collect, joint rates applying to or from Ellsworth Junction group on a prorating distance of 179 miles, for distances that are materially less than 179 miles, first taking out a one cent terminal for the Maine Central on traffic passing through those junction points or gateways.

"In both instances, therefore, the Maine Central compounds its revenue by the process stated.

"I now submit an exhibit of the 16 principal traffic points of origin and destination on the Maine Central Railroad."

A paper introduced by the witness at this point was received in evidence and marked Defendants' Exhibit 88, Witness Kallman.

The witness continued:

"This is a statement showing actual distance from Portland, Me., to each of the 16 stations on the Maine Central Railroad designated by complainants' witness, Mr. G. S. Hobbs, as the most important stations to and from which traffic is received and forwarded from and to points in Trunk Line and C. F. A. territory; also showing prorating distances received by the Maine Central Railroad in the division of rates to and from points on the New York Central and connecting lines via Portland, Me., and Rotterdam Junction. Column one shows the name of the station. Column 2 shows the junc-
853 tion point, as between the Boston & Maine and the Maine Central. Column 3 shows the actual distance from the point in column 1 to the junction point in Column 2. Column 4 shows the prorating distance received by the Maine Central to and from points on the New York Central east of Buffalo. Column 5 shows the excess of the prorating distance over actual distance on traffic moving to and from points on the New York Central east of Buffalo.

Column 6 shows the prorating distance received by the Maine Central on traffic moving to and from points on the New York Central west of Buffalo and connecting lines. Column 7 shows the excess of the prorating distance over the actual distance on traffic moving to and from points on the New York Central west of Buffalo.

"It will be seen that where there are joint rates to and from points east of Buffalo, the excess of the prorating distance over the actual ranges from 31 to 80 miles. In the case of C. F. A. territory, where there are joint rates, the excess of the prorating distance over the actual distance ranges from 31 to 112 miles. The foot notes are self-explanatory.

"I will next take up divisions of rates between the Rutland Railroad and the New York Central and connecting lines. Exhibit No. 64, introduced by Witness Cassidy, sheets 4, 6, 8 and 13, and the maps attached thereto, show groupings of Rutland stations
854 and divisions of rates to and from points on the New York Central and connecting lines. Sheet 4 shows divisions between the Rutland Railroad and the Chicago group of the Michigan Central Railroad; St. Louis group of the Wabash Railroad; the Indianapolis group of the Erie Railroad; the Grand Rapids group of the Pere Marquette Railroad; and the Cincinnati group of the C. C. C. & St. L. Railway, and the divisions thereof via Norwood, in connection with the New York Central Railroad. This exhibit shows that the prorating distances east of Norwood are in excess of the maximum actual distances from Norwood to the farthest points in the several groups, to the extent of from 138 to 215 miles, while the prorating distances west of Norwood in no case exceed 12 miles more than the maximum actual distance, with the exception of the Grand Rapids group of the Pere Marquette Railroad.

"Sheet 6 shows divisions between the Rutland Railroad and the Chicago group of the Michigan Central Railroad; the St. Louis group of the Wabash Railroad; the Indianapolis group of the C. C. C. & St. L. Railway; the Grand Rapids group of the Pere Marquette Railway; and the Cincinnati group of the C. C. C. & St. L. Railway. It will be seen from this exhibit that the prorating distances east of Norwood are from 115 to 135 miles in excess of the maximum
855 actual distances from Norwood to the farthest points in the percentage groups of the Rutland Railroad, while the prorating distances west of Norwood do not exceed the maximum actual distances more than 12 miles, with the exception of the Grand Rapids group of the Pere Marquette Railroad.

"Sheet 8 shows divisions as between the Rutland Railroad and New York City, via Chatham, N. Y., via Troy, N. Y., and via Rotterdam Junction, N. Y. It will be seen from this exhibit that the prorating distances of the Rutland Railroad range from 3 to 121 miles in excess of the maximum actual distances from the junction points to the farthest points in the Rutland Railroad groups, while the prorating distances of the New York Central are only from 4 to 20 miles in excess of the actual distances."

The traffic interchanged between the Rutland Railroad and the New York Central consists very largely of milk traffic. These divisions do not apply to the divisions of rates on fluid milk and cream, buttermilk, skimmed milk, pot cheese, etc. It is generally true that all the tables of divisions which witness has been analyzing, and which have been introduced in this record, relate to the divisions on traffic governed by the Official Classification, which does not include milk, cream, and certain other commodities, or coal. Those commodities are high explosives, fluid milk and cream, including buttermilk, skimmed milk, pot cheese, and bituminous and anthracite coal, and fresh meats in carloads.

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The witness continued:

"Sheet 13 shows divisions beween the Rutland Railroad and the Syracuse, Rochester, and Buffalo groups of the New York Central Railroad, via Troy. It will be observed from this exhibit that the prorating distance of the Rutland Railroad is 105 miles in excess of its maximum actual distance, while the New York Central prorating distance is its maximum actual distance, without any excess prorating mileage.

"I will next take up the divisions of rates between the Bangor & Aroostook Railroad and the New York Central Railroad. There are in effect joint class rates between points on the Bangor & Aroostook Railroad and points on the New York Central Railroad, applying via Brownville Junction, Me., Canadian Pacific Railway, and Adirondack Junction, Quebec. There are also in effect sundry commodity rates between points on the Bangor & Aroostook and points on the New York Central Railroad applying via the Maine Central and Boston & Maine and Boston & Albany Railroad. The class rates in effect via Brownville Junction, Me., and the Canadian Pacific Railway are based upon the addition by the Bangor & Aroostook Railroad of its own arbitrary proportions to the junction point rates, and whatever it adds accrues to it in the division of the rates.

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"Witness Wicks testified, at page 567 of the record, that joint rates via Northern Maine junctions in connection with the Maine Central Railroad are built up by adding to the through rate to Maine junctions on the arbitraries of the Bangor & Aroostook Railroad, which arbitraries accrue to that railroad in the division of the rates. Inasmuch as the joint rates between the Bangor & Aroostook and connections are constructed by the addition to the junction point rate of whatever amounts the Bangor & Aroostook Railroad nominate, it must be assumed that its proportions of the joint rates were considered reasonable when they were established, and if they are now insufficient, it would appear proper for the Bangor & Aroostook to propose increases in its charges that are requisite to secure the increased revenue, and the joint rates could then be correspondingly increased. No proposal of the character has been made, that I know of.

"I will next take up the divisions of rates between New England points and Pacific Coast terminals, commonly known as trans-con-

tinental divisions. The existing and long standing divisions of rates between New England points and Pacific Coast terminals and points taking the same rates are and have been as follows:

858 "First, westbound, from Boston, Mass., via all routes, and from other New England points when routed via Boston; also from Brunswick and Lewiston, Me., via the Maine Central and Boston & Maine Railroads; and from Portland, Me., via the Boston & Maine Railroad, the joint rates are divided on the basis of the lines east of Chicago receiving 27.5 per cent of the through rates, which proportions are subdivided as between the lines east of Chicago on the basis of the percentages applicable in the division of rates from and to the same points of origin to or from Chicago.

"On westbound traffic, from other New England points than Brunswick, Lewiston, and Portland, when not routed via Boston, the rates are divided on the basis of lines east of Chicago receiving the local or proportional rates applicable thereto, which local or proportional rates are subdivided on the basis of percentages as used in the division of rates to or from Chicago proper. When not routed, if the traffic originates at Manchester, N. H., for example, and is not forwarded via Boston, local rates to Chicago apply westbound. If traffic originates at Lynn, and goes through Boston, as it did for years, then they take 27½ per cent. up to Chicago.

"Second, as to eastbond traffic, on eastbound traffic from Pacific Coast terminals to Boston and points taking the same rates, the lines east of Chicago receive 25 per cent. of the joint rates,
859 which proportion is subdivided on the basis of divisions applicable on traffic from Chicago proper. The divisions of transcontinental rates, as between the lines west of Chicago, Peoria, and St. Louis, and the lines east thereof, have been the subject of controversy for years. For the purpose of this proceeding, it may be stated that at a conference held at Chicago between representatives of interested carriers, at which I was present, and at which the New England roads were represented by the general freight agent of the New York, New Haven & Hartford Railroad, it was proposed by the lines east of Chicago, Peoria, and St. Louis, that both eastbound and west bound rates from and to the Pacific Coast terminals, should be divided on the basis of allowing lines east of Chicago 28½ per cent. of the joint rates to and from New York and points taking the same rates, and 31 per cent. east of Chicago of joint through rates to and from Boston and points taking the same rates, subject to a minimum through rate of 75 cents per 100 pounds. If this proposal had been accepted by the ranscontinental lines, the revenue of the New England roads would have been increased, but not materially, on eastbound traffic, in excess of the proportions accruing under the division then in effect; and, as to westbound traffic, the New England lines would have received less than the
860 revenue they then received and are now receiving in the division of rates from New England points on traffic not routed via Boston. The revision of the divisions of transcontinental

rates is a matter of pending negotiations with the transcontinental lines.

"We come now to the consideration of the one cent or two cent terminal allowance. For many years prior to December 1, 1919, the Boston & Maine and Maine Central Railroads received a terminal allowance of one cent per 100 pounds in the division of joint rates with various carriers, as applicable to and from stations on the Boston & Maine Railroad, except stations on what was formerly the Fitchburg Railroad, and as applicable at stations on the Maine Central Railroad to and from which joint rates were in effect.

"As indicating that the terminal allowances were intended to be fixed and permanent, regardless of increases or decreases in rates, it should be stated that they were never changed from the time of their establishment until December 1, 1919.

"With the New York Central they were established when we opened up divisions with the Boston & Maine in 1900; but they existed with other roads long prior to that time.

"On December 1, 1919, the Boston & Maine and Maine Central Railroad issued supplements to their division sheets with connecting carriers, and provided therein for an increase of their
861 terminal allowance from one cent to 1½ cents per 100 pounds, which represented successive increases of 5, 15 and 25 per cent. on the one cent terminal, approximating a half a cent. This action was at first sought to be justified by reference to a letter addressed to carriers in the eastern region by Mr. D. L. Gray, traffic assistant, United States Railroad Administration, dated December 11, 1919, of which the following paragraph was quoted:

" 'Arbitraries of all lines should be advanced so as to give to each the proportion of General Order No. 28 increase it would have received had the road-to-road per cents never been established. Where a line receives a fixed arbitrary in addition to a percentage division of the through rates, such arbitrary should be advanced in proportion to the increases in rates.'

"In referring to traffic assistant Gray's letter of December 11, 1919, the Boston & Maine and Maine Central Railroads failed to quote the following postscript at the bottom of said letter:

" 'P. S.—It should be understood, however, that no change is to be made in the arbitraries covering New York lighterage service or other similar terminal arbitraries.'

"In a similar letter issued by Mr. William Hodgdon, traffic
862 assistant, Allegheny district, the following qualification appears:

" 'It should be understood that terminal and lighterage deductions are not to be increased.'

"Traffic Assistant Gray's letter of December 11, in its entirety, and his letter of December 23, 1919, indicated, according to my construction of it, that it was intended that where carriers' proportions

of joint rates were expressed in specific amounts, or where carriers received specific or arbitrary proportions of rates, for parts of their lines in addition to a percentage division of the remainder of the joint rates, the specifics or arbitraries were to be increased in proportion to the increases in the joint rates. Subsequently, the Boston & Maine and Maine Central, apparently perceiving they could not justify the increase in their terminal allowance of 5 and 15 per cent., in addition to 25 per cent., on the strength of their interpretation of Traffic Assistant Gray's letter of December 11, 1919, took the position that they were entitled to increases of 5, 15 and 25 per cent., and later of 40 per cent., upon the theory that since the terminal allowances were part of the joint rates that were increased 5, 15, 25 and 40 per cent., they were entitled to corresponding increases in their terminal allowances.

"The increased terminals taken by the Boston & Maine and Maine Central Railroad since March 1, 1920, have been, in my
863 judgement, in contravention of the following provision contained in Section 208–B of the Transportation Act of 1920:

" 'All division of joint rates, fares, or charges, which on February 29, 1920, are in effect between the lines of carriers subject to the Interstate Commerce Act, shall continue in force and effect until thereafter changed by mutual agreement between the interested carriers, or by state or Federal authorities respectively.'

"The Boston & Maine and Maine Central Railroads contend that by increasing their terminal allowances thus from one cent to 1½ cents, and later from 1½ cents to 2 cents per 100 pounds, they have merely applied the agreed divisions in such a manner as to give them their proper share of the revenue derived from the increased rates, but in no way does that action change the agreed divisions.

"I, nevertheless, contend that they have been violating the Act, because they did change the divisions. The terminal allowance is part of the divisional arrangement between carriers. They changed them without mutual consent and without their having been changed by state or Federal authorities.

"The present situation is that in settlement with their connections of revenue on eastbound traffic, the Boston & Maine and the Maine Central are taking a terminal allowance of 2 cents per
864 100 pounds, while the trunk lines, in settlement of revenue with the Boston & Maine and Maine Central Railroad on westbound traffic, are allowing those companies one cent per 100 pounds.

"I submit that if after the existence of periods ranging from 20 to 40 years of fixed and unchanging terminal allowances, regardless of fluctuations in rates, carriers which now enjoy substantial divisions of joint rates in addition to terminal allowances are to seek to increase their terminal allowances in the ratio that joint rates are increased, and are to make the increased terminal allowances retroactive, to include the 5, 15 and 25 per cent general increases in rates, it would not be unfair for connecting carriers to insist that the terminal allowances should be reduced in the ratio

that joint rates have been reduced since the allowances were originally granted.

"I mean by that that since those allowances were established countless commodity rates have ben put into effect, which were reductions from the class rates then in force, and if the principle is sound that the terminal allowance should go along with the rate, it should go down as well as go up. In the intervening years many reductions in rates have been made, chiefly by the establishment of commodity rates, which move large volumes of traffic. In-

865 cidentally, the Rutland Railroad, for some of the stations on its line, receives a terminal allowance of one cent. It has not taken and has not even asked for an increase in that allowance.

"In Official Classification territory there exist three general classes of terminal allowance: First, terminal allowances that represent exceptionally expensive terminal service, such as at New York City, and New York Harbor terminals, Philadelphia, and Baltimore. Second, terminal allowances in addition to percentage divisions for branch lines of main line carriers, principally in instances where the branch lines were formerly independently operated short lines and were acquired by the main line connecting carrier. An example of this character is to be found in the Newport & Wickford Railroad, which is now controlled by the New York, New Haven & Hartford. It is a short line running from Wickford Junction to Wickford. When it was independently operated, the Newport & Wickford Railroad's rates were, of course, separately established. When it was taken over by the New Haven Road, they put it into the percentage group in which Wickford Junction was placed, and then took arbitraries from their connections for the Wickford Branch in addition to the group percentages.

"The third class of terminal allowances consists of those

866 that are in addition to percentage divisions applicable to large groups of stations, such as exist in the case of the Boston & Maine and Maine Central Railroad. With the exception of classes 1 and 2, there are comparatively few railroads in the entire Official Classification territory that receive terminal allowances in addition to percentage divisions for groups of their stations, and such allowances are chiefly confined to a few roads in Trunk Line and New England territories. There are some instances where roads having short hauls which participate in the division of rates covering long distances have been conceded specific terminal allowances in lieu of constructive distances.

"With these exceptions, and with the exception of the terminal allowances that are grounded upon exceptionally expensive terminal service, there is no justification for one terminal carrier enjoying substantial prorating distances, especially where the prorating distances are constructive distances, taking a terminal allowance when no corresponding terminal allowance is made to the terminal carrier at the other end of the line.

"In so far as my experience, observation, and knowledge extends, terminal allowances of the character included in class 3, which are

under discussion with respect to the Boston & Maine and
867 Maine Central, are chiefly confined to roads having various connections and possessing, at the time the allowances were granted the ability to control the routing of competitive traffic. In such instances the allowances may properly be regarded as substantially a toll exacted from connecting carriers in addition to divisions of rates on a mileage basis.

"The next point is that per diem is not a proper factor in divisions. Prof. Cunningham, in his testimony at page 103, said:

" 'I am not suggesting that the per diem basis is an improper one, nor that the rates should revert to the mileage basis, but I am merely emphasizing that the factor of per diem should be given weight in connection with this petition.'

"In so far as my experience and knowledge extend, the basis of settlement betwen carriers for the use of their cars, whether mileage or per diem, has never been regarded as a factor entering into the making of divisions of joint rates. The divisions that existed when the mileage basis of settlement prevailed were not changed when the per diem basis was substituted, nor were the divisions changed as the rate of per diem was successively increased from 20 cents per day, in 1902, to $1 per day, as at present. When the divisions between the
868 New Haven and the New York Central lines were revised in 1906 and the percentages of the New Haven Road were increased, no consideration was given by either interest to the rate of per diem which then existed as a basis for the settlement for the use of freight cars.

"I may say that I participated in those negotiations and I feel competent to say that that is a fact.

"Attention is called to the following extract from President Pearson's testimony at page 440 of the record:

" 'The New Haven met the situation when the per diem was established by the liberal purchase of cars. It was a creditor road up to and including 1915, and for 7 months in 1919, but the additional investment in cars and cost of their maintenance represent largely a burden not carried when the divisions were established.'

"I again call attention to Prof. Cunningham's testimony, at page 107 of the record:

" 'It may be said that the remedy for the New England roads is to own more cars and thus to reduce their debit balance.

" 'To a certain extent this is true, and the New England roads which are short in equipment would have purchased more cars if they had been financially able to do so. But owning more cars will not relieve New England of the burden. The cost of main-
869 taining and paying interest charges on the additional cars would practically offset the saving in per diem, assuming that the per diem rate is held at the point which just represents the cost of ownership.'

"Again, at page 109, Prof. Cunningham testified:

" 'If New England owned sufficient cars to avoid a debit balance in the months of heavy traffic, it would have a surplus of cars in remaining months of the year.'

"The Commission on interchange of freight cars, appointed by the American Railway Association in 1908, which consisted of James McCrea, President, Pennsylvania Railroad; Lucius Tuttle, President of the Boston & Maine Railroad; W. W. Finley, President of the Southern Railway; Howard Elliott, President of the Northern Pacific Railway, and J. Kruttschnitt, Director of Maintenance and Operation, Union Pacific and Southern Pacific Systems, in its report dated May 17, 1909, said:

" 'The question was investigated as to whether one rate might be charged for a portion of the country or for a part of the year and another for the remainder, but your Commission considered that whatever conditions exist that appear to favor such arrangement, they are not sufficiently marked or stable to enable a differentiation to be made which would be just and equitable.'

"It is submitted that if divisions of joint rates should be
870 adjusted in favor of a carrier having debit balances for the use of cars of other carriers, one of the primary purposes of the per diem arrangement, namely, to increase the value in use of freight equipment by expediting the movement and by the avoidance of detention, would be largely nullified. Moreover, the stability of divisions would be largely destroyed, since the amount paid for per diem by debtor roads is variable, and some roads which for given periods are debtors, become creditors in other periods, as is evidenced in the case of the New Haven Road itself."

On the basis last referred to the divisions to the New Haven road prior to 1914, for several years, would have been changed adversely to that railroad. If the per diem were concededly a factor in joint rates, the divisions would fluctuate in different periods of the year, according to whether a road would be a debtor or a creditor.

The witness continued:

"I omitted one division. The New York Central lines have divisions with the Central Vermont. They do not cover our lines west of Buffalo. I did not traverse those divisions. There were not any divisional exhibits introduced by Mr. Dempsey, except one, showing the letters A to W, which I did not regard as important, and therefore there was not anything for me to go over. I did not go
871 over anything with reference to the Central Vermont Railroad."

The witness regards these divisions with the New York Central as liberal to the New England railroads. Where there is a poorly balanced movement, that is, 4 or 5 cars of raw material going into a ter-

ritory, and 2 or 3 cars of finished product going out, there will always be a debit balance from that territory, as long as the roads in that territory do not have an adequate supply of equipment themselves. They could make money by hiring cars out to other roads. A road, for instance, having a surplusage at one time and a shortage at another time can take care of itself by loading the foreigners out empty and sending their own cars out under load, and getting $1 a day from the other roads.

It does not necessarily follow that there is an adverse per diem balance unless that is a permanent continuing arrangement. The fundamental proposition is, how many cars has each road got, with reference to its own traffic that it originates. That underlies the whole proposition.

Adjourned until Wednesday, January 26, 1921, at 10 o'clock A. M.

872 VOLUME 3.

Washington, D. C.,
Wednesday, January 26, 1921—10 a. m.

WILLIAM S. KALLMAN resumed the stand and testified further:

Cross-examination:

Witness' work with the New York Central has been mostly in connection with the traffic department. He has had nothing to do with the operation of the New York Central.

Witness has been watchful of the New York Central interests and has done the best he could for them.

The present per diem charge is one dollar per day. It was 30 cents in 1906. Per diem was established in 1902 at the rate of 20 cents a day. One reason witness thinks it ought not to be considered with reference to divisions is because it is fluctuating.

If a situation has developed which has become a permanent and heavy burden on one road from which its connection is permanently free, that ought to be considered in adjusting divisions.

Witness would not say that the present rate structure is going to be permanent. As long as it lasts, the cost of coal is going to be raised to New England carriers. The cost of coal applies to the entire traffic of the railroad, not merely interchange traffic. To the extent that the interchange traffic bears relation to the whole traffic, it is a fair consideration to be taken into account in adjusting divisions, it being assumed that it would be a permanent thing;
at least, so far as it may affect the cost of doing the inter-
873 change business, it is a fair thing to take into consideration.

If it is permanent, any burden that is imposed upon the New England roads ought to be considered in adjusting divisions; if it is not common to the other roads, it would be fair to take it into consideration. If the standard of wage was lower in a con-

siderable portion of New England, that is, if they were able to get labor at a lower standard than the roads west of the Hudson River, and by reason of the award of the labor board, the standard has been raised to a horizontal level, so that for the same type of men they have to pay the same price the roads west do, and that adds a heavy burden, a heavy additional burden to the New England roads, it should be spread over the whole traffic of those railroads. If it is permanent, and so far as it may be said to bear relation to the interchange business, it ought to be taken into account.

Witness is familiar, only in a general way, with the car service rules. The New Haven cannot send out its empty cars into trunk line territory in order to have them brought back loaded. If there is any time when all the New Haven cars, or substantially all the New Haven cars, are not required in carrying its business out, in view of the fact that the balance of loads is against it, it is certain
that there will be a heavy tide of foreign cars bringing loads
874 into New England, temporarily.

Witness does not understand that the ratio of interchange today is five loads coming in and two loads going out. If that ratio exists, and if it should be permanent, there would be a burden on the road that received the inbound loads. But that burden could be offset by constructing or purchasing more cars. Witness means by the New Haven purchasing more cars. It would feed cars off its own railroad, and get $1 a day from the other roads. They are fed out, and do not come back in a day. Assuming the ratio of 5 to 2, it would not be at all times possible to feed out domestic cars. Witness is familiar with the other rule of the car service regulations, that where you have a foreign car on your rails and you have a load to go to the owner of that car, you must use that car and not one of your own. The necessary result of that situation is that unless there is business enough to use all these cars, you must necessarily have a surplus of foreign cars on your line, for which you pay per diem. And if you do have a complete equipment of your own cars, unless there is business enough to use all those cars, you are going to have your own cars standing idle.

If the result of that economic rule is such that instead
875 of no burden being carried by the New England roads in
the shape of per diem, prior to 1902, there is now an annual debit balance of the New England roads of approximately $17,000,000, which is consistent and persistent, that is a new condition which has arisen since those divisions were made. Witness does want to take it into consideration. He takes the position that the divisions today are very liberal to the New England roads, regardless of their present expenses.

Referred to this $17,000,000 per diem, the witness said that there is an offset to that in the fact that the free time in New England was reduced from 4 days to 2. Second, the car demurrage collected by the New England roads should be set off against it. Witness has not studied that to see what they get. He would like to know.

On all export business there is 8 days' free time to the shipper.

That does not mean it is held in the cars. It is a wrong assumption that there is a dollar a day for every one of those 8 days. The freight is not all held in the cars. It is unloaded on the piers, to the extent of the capacity of the piers. The railroad unloads it itself. That does not vary with the consignee. The shipper has nothing to do with it. It is under the control of the railroad. The release of the equipment taking export into Boston is under
876 the control of the railroad, either by loading it direct on the ship, or holding it on the piers until the ship arrives.

Witness does not know that it is very considerably held in the cars. The piers in Boston are quite ample. Witness knows generally that it is not. At times there might be some held. The rules allow 8 days free time to the consignee before storage begins. The rule is really a concession to the owner of the property to give him time for the clearance of freight from the rail to the ship, recognizing that ships do not operate every day to the same port. It is a recognition of a privilege which the shipper may have. He cannot keep his goods on the cars for 8 days at all. The railroad controls that, whether they will keep them in the cars or load them on the piers.

The rule has nothing whatever to do with the cars. The rule is not that there is 8 days' free time before demurrage begins, but 8 days' free time before storage begins. Witness does not know that there is any demurrage in Boston on export freight. It is storage on the piers. Witness is quite sure they do not charge demurrage on export. He does not positively know. The railroad does not have to pay per diem on each of those days. It can unload the cars and release the freight. On every day the car is on the New Haven rails it pays per diem. If the cars should stand 8 days in the yards at the piers, it pays per diem on every one of those days.

877 The witness has not lately looked into the time that is consumed by a car that his railroad delivers to the New Haven at any of its gateways that goes into New England and is unloaded and goes out again. He has known from time to time about what the average time was. Witness thinks that the fact that these New England roads have the ocean on one side of them and receive cars from only one side and have to turn them all back on the same side makes some difference in their problem, there being less overhead traffic. It does not necessarily nor practically result in a longer detention of the cars on their rails. Witness' company can move them off its rails in every direction, wherever it has connections. The New England railroads have connections at the west and north. The great bulk of their connections are at the west.

Foreign cars are taken by the New England roads at the western gateways and have to be delivered at the western gateways. If a new item of $17,000,000 has been added to the cost of the New England carriers since the divisions were established, which has not been added to the costs on the other side of the Hudson River, wit-

ness would have to know what that item is before he would say whether it ought to be taken into consideration in adjusting divisions.

878 The divisions between the New York Central and the Boston & Maine were established just before witness entered the service of the New York Central, in 1900. He was not with the New York Central at the time. He was with the Joint Traffic Association at the time. That was the year that the Boston & Maine leased the Fitchburg. Just prior to that the New York Central leased the Boston & Albany. At the time those divisions were established, the New York Central had its independent line into Boston. The Boston & Albany and the Boston & Maine have half a dozen common points, including Springfield, Worcester, Boston, and a few more. Those named are the principal points, and the three biggest traffic centers.

The West Shore, which was leased by the New York Central & had been for years, had divisions with the Fitchburg Railroad before 1900.

Witness' only complaint with the divisions which the New York Central had established with the Fitchburg was the length of the Boston block. It was not a question of what was considered fair at the time. It was a question of what you could get. He thinks the Boston block is too big now.

Witness had a complaint to make about these divisions when he came with the road.

Asked whether he complained, the witness said:

"The Fitchburg had another outlet through Mechanicville, and D. & H. What was the use of complaining? It was no use.
879 It would have been futile."

Witness' criticism is that the Boston block is too long. His road has no blocks quite as big. Their block south of Albany is 146 miles. It begins south of Troy and goes to New York City. There is a separate terminal allowance for the lighterage in New York Harbor. The block includes the New York City stations. It does not run down into New Jersey. The Hudson division block, for which the New York Central draws 146 miles, runs from the first station south of Troy to St. John's Park, New York City. That block does not go west. That is the whole block.

The Fitchburg block is 191 miles. Witness has not tried to diminish the size of his New York block. He is not satisfied with it, but it is the best that could be adopted at the time, and it has prevailed since.

The Boston block on the Fitchburg road is 45 miles longer. That is considerable difference, when you apply that prorating distance to short haul traffic. The Boston & Maine had the cent terminal before it took over the Fitchburg. When they opened up the route through the Fitchburg, they demanded the cent terminal for all stations except those that had been located on the old Fitchburg Railroad, and got it. It was a demand made on the new percentage proposi-

tion with other connections via other routes. They took it.
880 It was accepted under the compulsion of competition.

Although witness' road had its independent line to Boston, and another method of entering into Boston, Worcester and Springfield, that is not the whole of New England by an manner of means. The traffic of those three cities is not greater than the traffic of the balance of New England.

Witness' railroad went in on the basis of other connections of the Boston & Maine, and has never complained, because it would be futile. Witness always regarded the divisions then established and under which they have worked since 1900, and as to which he has made no complaint, as unfair. He does not know what the view of his management was.

Before the New York Central leased the Boston & Albany it had a working arrangement with that road, and also with the Fitchburg, so that it had access to Boston over both lines.

Asked whether he has perceived the fact that on all interchange business carrying that terminal, if it remains at 1¢, the lines west get more than a 40% increase and the Boston & Maine gets less, witness replied:

"The converse is true. When they take 2¢, we lose what we estimated we were going to get."

Asked whether if the Boston & Maine takes the increase which they claim the Commission allows them, they will get only 40% and the lines west will get only 40%, while if the terminal stays at 1¢, the lines West will get more than 40% and the Boston & Maine less, the witness replied:

"Yes."

Asked whether that was why the lines west are hanging on to it, witness said:

"No."

Asked whether they had any other reason, he replied:

"The same reason as you did. You estimated that you needed so much money. So did we. You figured on the terminal of 1¢. So did we."

The New York Central established terminals on New York business 40 or 50 years ago. The two-cent terminal prevails only via the Hudson River gateways. That was established with the Boston & Albany along about 1900, and with the Fitchburg, when the New York Central opened with the Boston & Maine, it simply followed the same course in 1900 with the Boston & Maine. The Boston & Maine followed the same course when the New York Central was admitted into their territory, of maintaining their 1-cent ter-
881 minal. The difference is that they do not have any terminal cost at their end of the line.

The New York Central terminals are based upon exceptional cost, and prevail only at New York. That terminal is deducted from the Rutland business that comes into New York. They do not have such terminal charges in their interchange with the Rutland in northern New York, which is deducted.

In arriving at the opinion which he has expressed that these divisions which were allowed the New Haven Road were fair, witness has not taken into consideration the revenue needs of the New England roads, unless he was satisfied that they were permanent. He has not taken into consideration the benefits received by his own road under the 40 per cent. increase.

Witness knows Mr. Hildum, and thinks he is an accurate accountant.

He has seen a statement filed by the complainant through Mr. Brigham, which was a copy of Mr. Hildum's statement of how this 40 per cent. increase was distributed. Witness has not the figures in mind, but if this statement shows that his railroad on its lines east, after this adjustment, would show a net income of something over $23,000,000, and on its lines west a net of something over $28,-
000,000, he will accept them. He will accept it on Mr. Hil-
882 dum's statement that the New England roads would show a deficit of $24,000,000. Mr. Hildum was chairman of some accounting committee of the trunk lines for the purpose of this case, and ex parte 74.

As an estimate, we are justified in accepting his conclusions that the New York Central got $51,000,000, and the New England lines lost $24,000,000. Witness does not believe that the New England roads' loss is greater than that. He has not studied it. He has not studied their problem at all. Asked whether he was aware of the statute that suggests to the Commission that they consider revenue needs, witness replied: "That is for the Commission to consider." Mileage is practically all that the witness has taken into consideration in his opinion. He has taken into consideration the mileage as a foundation for all divisions of rates. He has made due allowances, in his judgment, for the terminal character of the services performed by the New England roads, and, with that allowance, he believes the divisions are liberal.

Asked how much allowance he did make, either in dollars or percentages, for the terminal character of the New England roads, the witness replied:

"That is impossible of estimate in any particular case. It is a mere matter of judgment. I took this position, that where constructive distances were from 150 to 200 and 250 per cent. of the maximum actual distance, that those were liberal divisions, even considering the terminal character of the service performed by the New England roads."

883 There should be some consideration given to the fact that the character of the service performed by the New England roads is, upon the whole, more of a terminal character than the roads in the rest of the official classification territory. The char-

acter is different, not quite different. In some cases it would make a difference, in witness' judgment, of 10 per cent.; in others, not. In some cases 20 per cent., in others not. Witness does not mean 10 per cent. more per ton mile. He means 10 per cent. in the division of the rate. He would add 10 per cent. to the mileage, in some cases, not in all. That is based upon the terminal characteristics of the New England roads, the problems of operation, and another item, that their costs of coal and materials are somewhat higher than they are in the rest of the territory.

In a general way, witness has always realized that the terminal characteristics obtained in New England. It is not fair to say that this constructive mileage has always been conceded to the New England roads because of their terminal characteristics. Witness cannot tell why it was conceded. The recognition of the terminal characteristics of the New England carriers has been only in a general way. If these terminal characteristics and costs are aggravated permanently, it ought to be applied in a greater degree. Witness denies that they are permanent, so far as his judgment goes.

884 Witness has already admitted that as long as these rate increases are authorized by the Commission, there is a permanent increase in the cost of coal to the New England carriers. That is obvious. As applied to their whole traffic, as long as the Labor Board keeps the scale of wages higher than it used to be, there is a permanent added cost for the New England carriers. Those are two distinct and great aggravations, as applied to the whole traffic of the railroad.

It is not true that by using witness's own process of reasoning, New England is now entitled to an adjustment of those divisions that will give them a larger percentage than they have, because they are too liberal now.

The New York Central had divisions with the New Haven Road through the Boston & Albany back as far as 1895. The West Shore, which is the leased line of the New York Central, interchanged business with the New Haven via Harlem River for about two years. The New York Central interchanged at Beacon for about three years; also at Newburgh, with a car ferry across, and at Campbell Hall. There was a traffic agreement between the New York Central and the Boston & Albany in 1895, before the lease to the New York Central; just as there is today, there was some business interchanged with the New Haven Railroad at junctions with the Boston &

885 Albany. Joint rates were in effect, just as they are today, except as the rates have changed.

Beginning in 1895, it covered the whole of the New England territory. It did not cover the present portion of the New Haven Railroad which used to be the old New York & New England. It covered the New Haven Road as it then existed. That was a very much smaller system than it is at the present time. Those divisions were not then 25 per cent of the Boston-Chicago rates on business west of Springfield. They were not, in 1895, 20 per cent of the Boston-Chicago rates for business east of Springfield.

In 1895, commencing that year, the divisions were, with the New

Haven, 20 per cent for the western group and 16⅔ per cent for the eastern group, of the Chicago rates. Witness means east and west of Willimantic and New London. The divisions were increased with the New Haven road in 1906, at the time the Fishkill Landing route was abandoned. Witness's line did not gain any increased territory or divisions at that time.

Asked whether at that time his road wanted to interchange all of their business by way of the Boston & Albany junctions, the witness replied: "No. They wanted it."

The suggestion was made by the New Haven road. The junctions were Pittsfield, Westfield, Springfield, Worcester, Fram-
886 ingham, State Line, and Ashland. Ashland is a junction point between the New Haven and Boston & Albany, fixed by the New Haven road. There is a very small territory available via that junction.

Witness does not know that the New York Central division south of Albany was very much congested and that his road did not want to move that freight from New England down over its river division. So far as his knowledge goes, he denies it.

At that time, in 1906, witness' line had joint rates into what was the old New York & New England territory. They were established by Fishkill Landing and West Shore Railroad a great many years before that. They had them in 1895 with the West Shore Railroad, through Newburgh. The West Shore was leased by the New York Central. The revenue all goes into the New York Central's treasury. They did not, in 1895, have joint rates with the New York & New England Railroad, via the Boston & Albany. Witness cannot answer offhand when they did get them via the Boston & Albany. They had them before 1906. Witness thinks it was in 1903. There was no change in that division via the Boston & Albany in 1903. Witness' railroad was continuing to exchange with the New Haven System at Fishkill Landing before 1906. In 1906 all the interchange took place at Boston & Albany junctions, and has continued
887 so from that time until now, with the exception of the New York Central's local traffic on the river division. The only adjustment in divisions that was made was to increase the New Haven's percentages. The New York Central had the right before that time to solicit business via the Boston & Albany for points on their lines west, in all New Haven territory. They had rates and divisions before 1906. Those rates and divisions would have authorized the New Haven to route it over its longer haul, if they could solicit it that way from the New York Central agents. If they made the interchange with the New York Central at Fishkill Landing, or at any one of those points at the western end of the line, they got the long haul. By abandoning the Fishkill Landing gateway, they abandoned the long haul. The New York Central was free before then to solicit its own business in competition with all routes working out of New Haven territory.

After 1906 they had no competition from the New Haven as to its choice of routes. The result of that was, so far as the New Haven

was concerned, that business for the New York Central west, either in or out of New England, could be brought in via the Boston & Albany line to any one of these junctions with the New Haven, and then turned over to the New Haven for delivery. Witness' line had a very long haul on most of the western business.

888 What witness' line did was to bring freight where it could get a long haul, and turn it over to the New Haven at one of these junctions, and the New Haven would have to take it down a branch, to Fall River or New Bedford or Woonsocket, or Putnam, or one of those places, and deliver it, and bring the car back; and they preferred to do that rather than to haul it to Harlem River or Maybrook. Witness does not see that the New Haven surrendered anything. They did not have the long haul on that business; in the sense that witness comprehends the question they did not short haul themselves.

Referred to business from New Bedford, the witness said that the New Haven controlled the boat line from New Bedford to New York, and a rail line all the way from New Bedford to New York, which would be approximately 225 miles over their own rails. Under this arrangement they hauled from New Bedford to Framingham, about 50 miles, and turned it over to the Boston & Albany, and the Boston & Albany got the haul from Framingham to Albany, 180 miles, and then over the New York Central lines west. The New Haven got 20 per cent for about a 50-mile haul, which included all the terminal costs. On traffic to and from points in the western group, after 1906, they got 25 per cent. The same operation was performed at Worcester, at Springfield, at Westfield, at Pittsfield, and

889 at State Line. They performed a short haul and got good divisions for it.

Referred to Defendants' Exhibit No. 84, the witness said that the stations on the New Haven Railroad which he used as the basis for this exhibit were the stations which Mr. Slater testified were the stations which comprised the principal shipping points on the New Haven Railroad.

Asked whether he appreciated that Mr. Slater did not submit these as a list of the shipping points of greatest volume for freight that moved via Boston & Albany junctions, witness replied:

"I do not know what he had in mind at all. He submitted them in his exhibit."

There is nothing to show how much freight moves from these stations via Boston & Albany junctions.

Referred to the second station in his exhibit, Boston, where he pointed out that the excess prorating distance over actual distance is 223 miles, the witness stated that he can conceive of business moving from Boston via a Boston & Maine junction. This would be business that the New Haven Road wanted to send that way. They wanted the route put in via Framingham on Boston business. The distance between Boston and Framingham via the Boston & Albany Railroad is about 21 miles. Witness does not know what the route

is, via New Haven, by its own rails, but the distance shown in the exhibit is 43 miles. All freight that the New Haven Road wanted to send that way, that it solicited, would move from Boston to the Boston & Albany Railroad via Framingham. It is not an impossible or a most impracticable route. The New Haven did not consider it so. They insisted on that being put in. Witness has no knowl-
890 edge of any volume of business moving to Boston via Framingham.

Asked whether, if that is a fair sample of his exhibit, he has presented a chart as to which he has no knowledge how much business moves from any one of these points through any one of those junctions, the witness said:

"I should answer that no. I know traffic moves from all these points via the Boston & Albany."

Asked whether he has any knowledge as to the volume of it, the witness answered:

"Comparable with the other lines, it is just about as good as the others. We have solicitation in the New Haven territory, with all the other routes, and we do a large share of the interchange on the New Haven road's merchandise traffic. If there is a large volume, or traffic moves in volume from these 46 points through Maybrook or Harlem River, we move a large volume through B. & A. junctions."

Asked whether he means to say that they move through Framingham any business that compares in the remotest degree, out of Boston, with the volume of business that moves out of Boston over the New Haven rails, the witness said:

"Not for that one particular point, no. Witness understands thoroughly that Boston is the biggest shipping point in New England."

The amount of business that is overhead for the New York Central into New England is quite large. Considering the New
891 York Central, as distinguished from the Boston & Albany, it would not be half of the interchange with the New Haven Road at these Boston & Albany junction points. Including the Boston & Albany it would not be half. It would not be pretty nearly half. Witness has no figures on it. That is his general recollection of the figures he has seen in the past. He will say, however, that the amount of overhead business his road does into New England as a whole is very large.

Asked whether he is prepared to say that the divisions on the transcontinental business are fair to New England, the witness answered:

"Not fair to anybody east of the Mississippi River."

The lines in C. F. A. territory controlled by the New York Central are the Michigan Central; Cleveland, Cincinnati, Chicago and St.

Louis; Pittsburgh & Lake Erie; Lake Erie & Western; Toledo & Ohio Central; Kanawha & Michigan; Indiana Harbor Belt. That is the entire list as it now exists. Some of the roads which the New York Central controls interchange with either the Norfolk & Western or the Chesapeake & Ohio. Witness has no figures as to the volume of business they interchange with them, except as to coal. Coal is a very heavy interchange. As to merchandise, it is not very extensive; that is, with both those roads. That interchange is through the Big Four, and the Kanawha & Michigan, and Toledo & Ohio Central. There is a very heavy movement of coal from the West Virginia
892 mines to the Great Lakes. Witness' road, or some of its controlled lines, handle a great deal of it, and also into Michigan; not so much into the northwest, except as it goes through the Lakes. Practically none all-rail through to the Northwest from West Virginia.

Asked whether there is a very substantial difference in the character of the tonnage that is handled by the New York Central and the tonnage handled by the New England roads, the witness said:

"If we eliminate iron ore and coal, no. If we include those two commodities, yes, sir."

Asked whether this included iron ore and the products of iron, the witness said:

"No, the products of iron are manufactured into wire at Worcester."

Witness' railroad gets into Pittsburgh. While there is one wire mill in Worcester, there is quite a little steel industry in Pittsburgh. Witness' road does not get into the iron ore region with its own rails. It handles a great volume of this business from the lake ports. It handles a very heavy grain business, and a very heavy business in dressed meats and live stock.

Asked whether a very large part of those kinds of business is handled in solid trains, the witness said:

893 "You will have to differentiate. I would not apply that to all that traffic."

Asked how about coal, the witness said:

"Coal between certain points, yes."

Grain is not handled in solid train loads, except out of Buffalo and Chicago. Dressed meats, brick and cement are not handled in solid train loads. Livestock and ore are so handled.

The cross-examiner has covered about all that moves in train loads. Grain and livestock is all that is handled for long distances in solid trains. The haul on ore is from 50 to 125 or 150 miles. Coal moves only up from the mines to the main line, say 250 to 300 miles. Afterwards it would be spread out, and go east and west. Solid

trainload movements of coal would not run with witness' road more than 300 miles on the lines east. Witness has not in mind the point of interchange with the Pocahontas lines on coal. It would be farther east than Cincinnati. On the eastern end witness' line does not connect direct at all with the Pocahontas lines. It handles it through other lines. There is a great volume of cargo coal which comes up from the Pocahontas lines in train loads, and witness' line handles it in train loads up to the Great Lakes and Michigan.

There is no such business originating in New England—no coal or iron ore.

There is no possibility of the New England lines handling
894 heavy freight like that in train loads.

Asked whether that is a very profitable business for the railroads, the witness replied: "No."

Asked whether it could be done at a minimum cost, the witness said:

"Yes; but you will never get rich hauling iron ore or coal."

Possibly trunk line people differ a little on that. Possibly many of the trunk line people believe that anthracite is the most profitable business there is, and in some cases bituminous.

Witness has made no study of the cost of operation in New England. Only from time to time has witness made any study of the cost of operation of his own line, knowing what the cost was, and the ratio. He has not made any detailed study within the last two or three years. In expressing his opinion as to these divisions, he has made no comparison of the cost of operation in New England and in his own territory. It is only as he understands it generally.

He has studied the increased cost of labor, material, and so forth, in New England, only as he knows that the cost of wages and the cost of coal and other materials and supplies have increased. Witness' opinion might, in general terms, be stated about this way: That he regarded mileage as the fundamental factor in establishing
895 divisions; and thought that the constructive mileage that had been given the New England roads some years ago was more than adequate. He has made no detailed study of the increased cost in New England since that time. He knows that some costs have increased. He does not consider that any evidence he has heard as to these costs outweighs the consideration of the divisions. He is generally conversant with that situation and the increased costs there and here, and he is basing his opinion upon the whole.

Asked whether, if the Central New England, whose business is about 97 per cent. interchange cannot get enough out of that business to pay fixed charges, the divisions are not big enough, the witness said:

"I don't know what the divisions are on the overhead traffic. Until I do, I cannot answer your question."

Asked whether if the Central Vermont and the Rutland, whose business is 70 to 80% interchange, are not obtaining enough to meet

their fixed charges, he could say whether or not their divisions were adequate, witness replied that he had heard no testimony that 70 to 80% of their business is interchange and that he would rather not assume anything and refused to answer the question as an assumption.

Asked whether, even if it were shown to him that a railroad which depended almost wholly on this joint rate business was not able to pay its fixed charge, he would not say that its divisions were inadequate, the witness replied:

"It depends on whether the road is efficiently and adequately managed. That would play a large part with me before I could answer."

Witness has made no criticism concerning the management.

896 Witness is not willing to take into account or give any serious consideration, as such, to the revenue needs of the New England roads.

Asked whether he has taken into account and is willing to give any consideration to the importance of the New England roads to the public for service, witness replied:

"That is for the Commission."

Asked whether he does take it into consideration, he replied:

"No, that is for them to take into account—not me."

Asked whether in the opinion which he has expressed he has considered that at all, he replied:

"Not from that angle. That is for the New England roads to consider."

Asked whether he has considered their importance as a military factor, he replied:

"That amuses me."

Asked again whether he has considered it, he replied:

"No."

He is inclined to cling to the old-fashioned method of deciding how rates shall be divided, by sticking to mileage as a fundamental factor. He has given other things which he thinks should be taken into account.

Redirect examination:

There are no joint rates from either trunk line or New England territories to points west of the Mississippi River, except transcontinental territory and except St. Paul, Minneapolis, and points in that vicinity. With those exceptions, there are no joint rates to

points west of the Mississippi River, and the traffic is not extensive in volume from New England to that territory. From the south there are rates from the whole of the South to the east of the Mississippi River; but that south bound traffic is not material in volume.

Northbound there is more than there is southbound. Cotton and lumber and naval stores are the chief things coming
897 north, and fruits and vegetables.

The Chesapeake & Ohio moves its coal to the lakes mostly over its subsidiary, the Hocking Valley. Largely the coal which the New York Central lines move from that region originates on the Kanawha & Michigan or the Toledo & Ohio Central.

CHARLES L. EWING, called as a witness on behalf of the defendants, testified:

Direct examination:

That he has been connected with the freight traffic department of the Central Railroad Company of New Jersey for approximately 18 years; during the first 8 years in various capacities—rate clerk, tariff clerk—for the next 5 years as chief of Tariff Bureau; the succeeding 5 years as assistant general freight agent, his present position.

The only direct connection the New Jersey Central has with any of the New England carriers is at Jersey City, where they interchange traffic with the New York, New Haven & Hartford Railroad by means of their carfloats.

In the interchange of traffic as between the New York, New Haven & Hartford Railroad and the trunk lines, the Pennsylvania ranks first; the Central of New Jersey second. In addition
898 to the direct connection via Jersey City, there is another method of interchanging with the New Haven over which a substantial amount of the interchange tonnage moves. This is via Lehigh & Hudson River Railroad, connecting with the Central Railroad of New Jersey at Easton and terminating at Maybrook, New York, at which point it connects with the Central New England Railroad. Traffic routed through Maybrook leaves the Jersey Central line at Easton, Pennsylvania, and the distance from Easton to Jersey City is 73 miles. From Easton to Maybrook, which is part of the route covered by the Lehigh & Hudson River Railroad, the distance is 86 miles.

Witness offered a map which was received in evidence and marked Defendants' Exhibit No. 89, Witness Ewing, showing the Central Railroad of New Jersey in red, the Lehigh & Hudson River Railroad in alternate yellow and purple; the Central New England in blue, and the New Haven in green, and the Boston & Maine in purple.

The zone on the left hand side of the map, colored in brown, and the zone on the right hand side of the map, colored in yellow, indicate that all traffic interchanged between those two zones in connection with the Central Railroad of New Jersey and the New York, New Haven & Hartford Railroad moves via Central Railroad of

New Jersey, Easton, Lehigh & Hudson River Railroad, May-
899 brook, Central of New England, and New York, New Haven & Hartford. The distance between any points in the brown zone and any point in the yellow zone is considerably shorter via the Jersey City-Harlem River route than via the Easton-Maybrook route; the latter route being the one used.

Every ton of traffic originating at or destined to points in the brown zone, shown on the left hand side of the map, and going to the green zone, shown on the right hand side of the map, moves via the Maybrook route, which is longer by actual mileage in every instance than if it had moved through the Jersey City route. There is one additional carrier participating in the Maybrook route, the Lehigh & Hudson River Railroad.

As to traffic originating on the Jersey Central itself and moving via the Maybrook route, there is necessarily a two-line haul up to the gateway; whereas there would be only a one-line haul via the Jersey City gateway. If the traffic moved via the Jersey City gateway the Jersey Central would get a haul of 73 miles longer than it now gets, representing the distance from Easton to Jersey City. The routing of the traffic between those two zones prior to 1907 was via Jersey City, float and Harlem River, N. Y. So far as the Central Railroad of New Jersey traffic is concerned, the diversion in routing to Maybrook began in September, 1908.

900 The change was caused by the New York, New Haven & Hartford Railroad refusing to interchange traffic with the Central Railroad of New Jersey in New York Harbor, or through New York Harbor. The matter resulted in a formal complaint by the Jersey Central to the Interstate Commerce Commission. This resulted in formal hearings, but prior to final consideration and decision by the Commission, they reached an agreement with the New York, New Haven & Hartford Railroad Company to restrict the Jersey City interchange to certain territory on the Jersey Central line—Allentown, Pennsylvania, and east, and the case was dismissed by the Commission. That was I. C. C. Docket No. 1400.

This agreement was not at that time, nor has it been since, satisfactory to the Central Railroad of New Jersey, as it had the effect of short hauling it on all traffic interchanged with the New Haven between points on or west of its line, Allentown, Pa., or points west thereof.

With the change in routing, the New England lines demanded the same revenue east of Maybrook as they formerly received east of Jersey City, and this made it necessary for the Central Railroad of New Jersey to assign and pay to the Lehigh & Hudson River Railroad a large portion of its revenue to compensate the Lehigh & Hudson River Railroad for its service between Easton, Pa., and Maybrook, N. Y.

901 On traffic received from or delivered to the connecting lines at Allentown, Pa., where the New Jersey Central formerly enjoyed revenue for the haul to Jersey City, a distance of 89 miles, the change in routing to the Easton-Maybrook route meant that it handled such passing-over traffic for a distance of 16 miles, with a corresponding depletion in its revenues. As to the over-

head traffic handled between Allentown and Easton, the distance is 16 miles.

Asked as to what is his information generally as to the relative advantage or disadvantage of the Central Railroad of New Jersey handling traffic over that 16 miles, as compared with their getting a longer haul on their system, the witness said:

"Well, in the first place, the term 'bridge traffic' is not entirely clear to me; but if it means the passing-over traffic, wherein we are an intermediate carrier, I would not call it bridge traffic. I think the term is not descriptive, because we have considerable engine service to perform in that passing-over movement. It is not a fact that the connecting line, for instance, moves a car or a train of cars over our route as though it were a bridge. We have an engine at Allentown for traffic delivered to us by the Philadelphia & Reading. We will move the traffic up to Easton. It could not be termed 'bridge traffic.'"

902 There is a yard service at each end of that little 16-mile haul. In arranging to handle the interchange traffic across that little haul, the Central Railroad of New Jersey has to move the cars as they are received from the connecting lines. They cannot hold them up until they get a train-load. They must switch the cars between Allentown and Easton at least daily.

When this diversion occurred, the New York, New Haven & Hartford Railroad, or the New England lines, demanded the same proportion east of Maybrook as they formerly received east of Jersey City, although via Maybrook they did not have any boat service to perform between Jersey City and Harlem River.

The divisions that have been in effect all along from Jersey City via the Jersey City route include a constructive mileage of 60 miles on long haul traffic, 40 miles on short haul traffic, for the float service.

There is no float service whatever performed by the Maybrook route, and yet that constructive mileage is reflected in the division that the New Haven takes via that route. The Jersey Central handles a substantial amount of coal in interchange with the New England roads. When it moves in connection with the New York, New Haven & Hartford, it moves via Easton and Maybrook, N. Y., via the Maybrook route.

903 Witness' testimony and exhibits and the matter he will cover will relate solely to the divisions on traffic covered by the classification, and as defined by Mr. Kallman. Witness has heard the testimony of several of the traffic witnesses for the complainant. He heard the testimony of Mr. Wood. Witness thinks that nothing in the testimony given by Mr. Wood indicated any divisions, or referred to any divisions of the Jersey Central. If it did, it was so slight as to be not worth considering.

There was nothing in the complaint as originally filed and there is nothing in the amended complaint, indicating what divisions of the Jersey Central are of interest in this proceeding. The amended complaint that was filed by the complainants at the request of the

Commission did attempt to show, in what they called their Appendix B, certain divisions which, witness presumes, they considered typical and the complainants considered typical. So far as the Jersey Central is concerned, they showed a few specific divisions between points on the Boston & Maine and the Jersey Central. This was via the Wilkes-Barre & Mechanicville route, which was in no way typical of the situation. Witness cannot say whether the volume of the movement going via the only two or three instances given in Appendix B, is almost negligible. He has not the points
904 in mind. In fact, they paid very little attention to the appendix.

Witness has prepared an exhibit dealing with an analysis of the general bases of divisions via one of the numerous routes into New England, showing the present divisions between points on the Central Railroad of New Jersey and points on the New York, New Haven & Hartford Railroad via the Easton-Maybrook route.

The statement referred to was received in evidence and marked Defendants' Exhibit No. 90, Witness Ewing.

This is only one of 14 general bases of divisions as to classification traffic in which the Jersey Central alone is interested, to and from New England territory, between points on its own road and points on the New England roads.

This exhibit, and what witness is going to state about it, cannot be said to be representative of Central New Jersey percentage with New England carriers, or carriers via other routes, except that it shows generally that the allowances to the New England lines are considerably greater than the allowance to the Central Railroad of New Jersey. That is generally true of all their divisions with the New England lines.

Attached to the exhibit is a map of the Central Railroad of New Jersey, and it shows in colors the three groups on the Jersey Central to and from which the percentages shown in the ex-
905 hibit apply. The other map likewise shows the percentage groups on the New Haven Railroad to and from which these percentages apply. The New York, New Haven & Hartford Railroad, shown in yellow on the map, takes the Boston basis of divisions. Under the Boston basis of divisions the New York, New Haven & Hartford Railroad draws, east of Maybrook, for 260 miles from the Central Railroad of New Jersey first group, or Catasauqua group, and 282 miles from other points on the Central Railroad of New Jersey via the Maybrook route. That grouping which has been and now is applied via the Maybrook route, is simply a survival of conditions and considerations that were applicable via the Harlem River route.

Asked whether, assuming that there was at some time some reason for treating the yellow lines on the left of the map as in the Boston group via the Harlem River gateway, witness knows of any reason that has ever been suggested why those lines of the New Haven nearest to the Maybrook route should be drawing the same percentage divisions as the Boston territory draws, the witness replied:

"I do not know of any reason, from a mileage standpoint, or any other standpoint."

There is a most striking discrepancy as to all of that territory shown by the yellow lines on the left of the map between
906 the constructive mileage allowed the New Haven and the actual milage of service performed.

From Maybrook to Danbury, the constructive mileage allowed is either 260 or 282 miles. That constructive mileage to that territory shown as the Boston group is the basis by which the New Haven divides revenue with every one of the lines which route traffic through the Maybrook route over the Jersey Central.

The same situation that witness has described works to the prejudice not merely of the Jersey Central, but of the connecting lines down through western Maryland and the west and south of the country over.

Asked to explain the significance of the exhibit, the witness said:

"The exhibit shows that at the present time percentages between points on the Central Railroad of New Jersey and points on the New York, New Haven & Hartford via the Easton-Maybrook route are made up by dividing the Ceneral Railroad of New Jersey into three groups. One group covers stations on its Lehigh and Susquehanna Division west of Catasauqua, Pa., to Parryville, Pa., inclusive. On this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railroad jointly receive 100 miles. The maximum haul from Maybrook to any point in the group is 126 miles, or
907 26 miles more than the block mileage allowed the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly.

"The second group covers stations on the Central Railroad of New Jersey west of Parryville to White Haven, Pa., inclusive. On this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly receive 150 miles for an actual maximum haul of 156 miles, or 6 miles more than the block mileage allowed the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly.

"On the first group, which covers our stations Catasauqua to Parryville, inclusive, the route west of Maybrook draws for 100 miles. On the second group, covering stations west of Parryville to White Haven, the line west of Maybrook draws for 150 miles. That is the reason for splitting it. Our second group is really divided into two separate blocks, depending on what the destination is on the New Haven.

"On page 2 of the exhibit the third group covers all stations on the Central Railroad of New Jersey west of White Haven, Pa. On this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly receive 204 miles for an actual maximum haul of 205 miles, or one mile more than the block mileage allowed the Central Railroad of New Jersey and the Lehigh & Hudson
908 River Railway jointly.

"The New York, New Haven & Hartford stations are divided into four groups, as shown in the left hand margin of the ex-

hibit. It will be noted that the New York, New Haven & Hartford Railroad is allowed mileages which on all of the groups except the Hartford-Catasauqua group are considerably greater than their actual maximum haul from Maybrook to any point in the different groups.

"For example, taking the first group, the Hartford group, the maximum distance from Maybrook to any point in that group is 165 miles, at New London, Conn. They draw for but 140 miles, or 25 miles less than their actual maximum distance.

"From the Hartford group to the Weissport-White Haven group the maximum haul of the New York, New Haven & Hartford Railroad is 165 miles from Maybrook to New London, Conn. They draw for that 282 miles, or 117 miles more than their actual maximum haul.

"On the same page, between the Boston group and the Catasauqua group, the maximum haul is Maybrook to Boston, 249 miles. The line is allowed a 260-mile constructive distance, or 11 miles more than their actual maximum haul.

909 "Between the Boston group and the Weissport-White Haven group, without going into all the details, the constructive mileage is 33 miles in excess of the actual maximum haul.

"Between the Westfield group and the Weissport group the constructive mileage is 106 miles greater than the actual maximum haul.

"Between the Framingham group and all the Central Railroad of New Jersey groups on the exhibit the constructive mileage is 62 miles greater than the actual maximum haul.

"I won't go into the second page of the exhibit in the same manner. The results are practically the same. It indicates that, while the lines west of Maybrook get, in many cases, less than their actual haul, the lines east of Maybrook receive considerably more than their actual maximum haul.

"Sheet 3 of the exhibit shows the total percentage allowances between all points on the New Haven and all points on the Central Railroad of New Jersey covered by the exhibit. We have totaled those allowances and made an average of them, which shows a comparison of the average total percentage under present per cents and the average total under a 50-mile block plan with additional 50-mile blocks to the terminal carriers.

"That shows that under the present percentages the New York, New Haven & Hartford Railroad would receive an average of
910 65.7 per cent, while under the 50-mile block plan they would receive an average of 51.8 per cent."

The exhibit the witness presented does not even summarize the bases of division between the Jersey Central and the New Haven on local traffic, because this covers only the per cents on traffic via the Maybrook route.

The situation via the Jersey City route as to per cents is somewhat different, so that a separate exhibit of the same character would be necessary to give even a picture of the bases of divisions locally

between the Jersey Central and the New Haven through the Harlem River route.

The divisions via the Jersey City gateway are different in so far as the Central Railroad of New Jersey's revenue is concerned—decidedly different. The Central Railroad of New Jersey has three different bases of percentage divisions on classification traffic with the Boston & Maine: One via the Jersey City-Harlem River route; one via the Easton-Maybrook route; one via Wilkes-Barre, Pa., Delaware & Hudson Company and Mechanicville, N. Y.

Witness has the same sort of a summary as to the bases of the percentage divisions of the New Jersey Central on local traffic with the Boston & Maine through the Easton gateway.

The exhibit referred to was introduced in evidence and
911 marked Defendants' Exhibit No. 91, Witness Ewing.

This exhibit, in the map at the end, shows the three Jersey Central groups involved in this particular percentage basis, and shows three Boston & Maine groups in color.

Asked to state the significance of this exhibit, the witness said:

"This exhibit shows that at the present time percentages between points on the Central Railroad of New Jersey and points on the Boston & Maine Railroad via the routes specified are made up by dividing the Central Railroad of New Jersey into three groups.

"One group covers stations Catasauqua to Parryville, Pa., inclusive. On this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly receive 100 miles. The maximum haul from Maybrook to any point in the group is 126 miles, or 26 miles more than the mileage prorate allowed the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly.

"The second group covers stations on the Central Railroad of New Jersey Weissport to Glen Onoko, on sheet 1, and White Haven, on sheet 2, inclusive; and on this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly receive 150 miles for an actual maximum haul of 156 miles, or 6 miles
912 more than the mileage prorate allowed the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly.

"On sheet 3 it shows the third group, covering all stations west of White Haven. On this group the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly receive 204 miles for an actual maximum haul of 205 miles, or one mile more than the mileage prorate allowed the Central Railroad of New Jersey and the Lehigh & Hudson River Railway jointly.

"Reverting to page 1, the Boston & Maine Railroad stations are divided into three different groups. The maximum distance shown for the Boston & Maine Railroad, on the left hand margin of the exhibit, covers the actual distance between Boston & Maine Railroad points indicated, and Northampton, Mass., the junction point between the Boston & Maine Railroad and the New York, New Haven

& Hartford Railroad. Those actual distances, plus the New York, New Haven & Hartford Railroad's actual distance of 155 miles from Northampton, Mass., to Maybrook, N. Y., will indicate that the New York, New Haven & Hartford Railroad and the Boston & Maine Railroad jointly are allowed group mileages which are considerably greater than their actual maximum haul from Maybrook to any point in the various groups.

"For example, in the Portland group, the actual maximum haul is at Intervale, which is 208 miles, plus 155 miles, or 363
913 miles, but they receive 393 miles, or 30 miles in excess of their actual maximum haul.

"At the Sherbrooke group they receive 73 miles in excess of their actual maximum haul.

"On the Boston-Worcester group and the Catasauqua-Parryville group on the Central Railroad of New Jersey, the prorating allowance to the line east of Maybrook is the same as their actual maximum haul, 260 miles; but between the Boston-Worcester group and other points on the Central Railroad of New Jersey the lines east of Maybrook receive 22 miles in excess of their actual maximum haul.

"We have shown on this exhibit a comparison as between the present percentages and percentages based on the 50-mile block plan, plus the 50 miles additional for the terminal carriers.

"It shows, generally, that the present allowances to the lines east of Maybrook, or the New England lines, are very liberal and considerably more than they would receive on a 50-mile block basis.

"On sheet 3 of the exhibit we have shown the average percentage for the Central Railroad of New Jersey and the New England lines based on the present per cents and on the comparative per cents. This indicates that on the present percentages the New England carriers would receive an average of 71½ per cent., while on
914 the comparative or 50-mile block plan they would receive 62.3 per cent., average.

"It should also be noted that the lines east of Maybrook are allowed constructive distances which are based on the allowance for the float between Jersey City and Harlem River, N. Y., although there is no float service performed via the Maybrook route."

Witness has heard much of the testimony in this case.

Asked whether he had heard any reason suggested why the Boston & Maine should get a one-cent terminal deduction on traffic originating at or destined to points on the Jersey Central, the witness said:

"Absolutely none that were satisfactory, Mr. Elder. I do not recall that any reason was attempted by the complainants or that any explanation was made of it."

Witness has made a study of the percentage bases applying via the other two points to Boston & Maine points and the percentage bases applying in connection with each of the other carriers. There are 12 more.

Asked what, from his study of all these bases in this manner, and viewing the thing and testing the divisions solely on these standards of mileage prorate and 50-mile blocks rate, is his opinion as to all of the percentage divisions on the 14 different bases, the wit-
915 ness said:

"That they are all extremely liberal to the New England carriers; that the results, as tested by the 50-mile scale, are practically the same as in the two exhibits we have just analyzed."

Witness took the 48 tonnage points furnished by the New Haven, and showed on another exhibit the relationship of the constructive mileage allowed the New Haven to and from those 48 tonnage points, as compared with the actual mileage that they haul the traffic.

The exhibit referred to was received in evidence and marked Defendants' Exhibit No. 92, Witness Ewing.

Asked to briefly summarize his Exhibit No. 92, the witness said:

"As stated on the exhibit, this shows the actual distance from each of the stations of the New York, New Haven & Hartford Railroad which have been designated by their witness, Mr. Slater, as the stations handling the largest amount of received and forwarded tonnage; and we have shown on the exhibit the actual miles from Communipaw, which includes 13 miles for the float service between Communipaw and Harlem River; also the actual distance from Maybrook, N. Y., the prorating mileage allowed the New England carriers east of either Communipaw or Maybrook and the
916 excess of prorating distance over actual distance via either Communipaw or Maybrook to all of the points shown on the statement.

"It indicates that generally the New England carriers are receiving on traffic to and from practically all of those important tonnage stations considerably more than their actual distance."

The prorating mileage as reflected on this exhibit includes 40 or 60 miles for the steamer Maryland via both the Maybrook route and the Harlem River route. The actual distance from Communipaw is 13 miles, representing the actual float service from Communipaw to Harlem River.

Witness has prepared a similar exhibit as to the 30 heaviest tonnage points furnished by the Boston & Maine.

The exhibit referred to was received in evidence and marked Defendants' Exhibit No. 93, Witness Ewing.

Asked to very briefly explain his Exhibit No. 93, the witness said:

"The explanation I gave as to Exhibit No. 92 will apply here, except that we have the additional junction point of Mechanicville, N. Y. The results of prorating mileage over actual mileage are even greater than in Exhibit No. 92."

Witness has another exhibit covering the 16 heaviest tonnage points furnished them by the Maine Central.

The paper referred to was received *and marked* in evidence
917 and marked Defendants' Exhibit No. 94, Witness Ewing.

Asked whether any comment was necessary on that exhibit, the witness said:

"Well, on this exhibit there are but a few points—but four points where there are any through rates or divisions in connection with the Central Railroad of New Jersey. Those points are Lewiston, Rockland, Pejepscot Mills and Fryeburg."

Recess until 2 o'clock P. M.

CHARLES L. EWING resumed the stand and testified further:

Cross-examination:

The Philadelphia & Reading Railway owns a certain amount of stock in the Jersey Central. Witness believes that it owns a controlling interest. He is not sure of that. The New York Central and the Baltimore & Ohio Railroad own a substantial interest in the Reading. To what extent he is not prepared to say.

The Baltimore & Ohio has another possible method of connection with the New Haven at Harlem River side from the Central Railroad of New Jersey, by way of the Lehigh Valley Railroad. The Central Railroad of New Jersey is the route which the B. & O. uses, and it is the route which the Reading uses.

Allentown is where the Central Railroad of New Jersey connects with the Philadelphia & Reading on Baltimore & Ohio traffic. Parryville is 40 miles west of Easton on the Lehigh and Susquehanna division of the Central Railroad of New Jersey. It is
918 the end of the Central Railroad of New Jersey's 100-mile block. That was adopted in the exhibit because it was the end of the group, the farthest point in the group to which the Central Railroad of New Jersey received 100 miles, under the blocking arrangement.

Witness cannot say when the divisions via Harlem River were established with the Central Railroad of New Jersey. He has not gone into the history. It was before his time. He has been with the road for 16 years. It was probably earlier than 1900. The point of interchange changed to Maybrook on September 1, 1908.

It is possibly true that to the eastern end of the line for the New Haven the change to Maybrook involved a longer haul for the New Haven to the principal shipping points on its own line. Witness thinks it would make the route 54 miles longer from Maybrook to Bridgeport than from Harlem River. Deducting 13 miles for the floatage, that would leave 41 miles. The distance from Harlem River to Hartford is 105 miles. Adding 13 miles for float, it would be 118 miles. The distance from Maybrook is 136 miles, making a difference of 18 miles. From Harlem River to New Haven is 68

miles. From Maybrook it is 114 miles, a difference of 46 miles as between Harlem River and Maybrook. To Willimantic the difference is 42 miles between Harlem River and Maybrook. To Providence the distance, from Harlem River, is 42 miles less than the distance from Maybrook. In transferring the interchange to Maybrook, the New Haven undertook a longer haul on that business to its principal shipping and distribution points of between 18 and 45 miles. It also involved the movement of all traffic interchanged at Maybrook over the Poughkeepsie Bridge. Witness does not think, when they interchanged at Harlem River, prior to the transfer, his road had been pretty badly congested at that point. Witness has never heard that the float bridge capacity of his road was limited at the Jersey end. They did not consider it true at the time. Witness was on the road at the time of the transfer.

919

Asked whether it was the practice for the Central Railroad of New Jersey to close against floats to the New Haven during the busy morning and evening hours, the witness said:

"The New Haven may have alleged certain things of that character. I have never heard it admitted. The float service was divided up between the different terminals in New York Harbor who floated to Jersey City."

Asked whether he had heard that complaints were made at the time, the witness said:

"I have seen many things in the complaints, sir, that were never admitted."

Asked whether at that time he heard complaints from the New Haven that the Jersey Central float bridge was practically embargoed morning and evening so that the New Haven could not transfer with them, he replied:

920 "I think they made some such allegations, yes, sir."

If this allegation is true, it would substantially impair the Central Railroad of New Jersey's capacity to make free deliveries during those periods in the morning and evening. They would have the rest of the day to deliver them. The Central Railroad of New Jersey had other deliveries to make besides to the New Haven. Witness does not know why they should have picked out a certain time and asked that deliveries should be made in that hour, morning or evening. The Central Railroad of New Jersey had to apportion its floor capacity among the different people with whom they had to deal. Possibly the morning and evening hours were the busiest times of the day for this service.

Witness is not prepared to admit that there were many occasions when the capacity of his road to deliver freely to the New Haven morning and evening was interfered with. So far as his knowledge is concerned, he denies it. Witness believes that was one of the

arguments used by the New Haven. He thinks it was a very small part of the reason. It was one of the allegations the New Haven made when the C. N. J. acquiesced in the transfer to Maybrook.

Asked whether they still transfer via Harlem, or does everything go to Maybrook, the witness said:

"No; there is a small—you are speaking of the territory that was transferred via the Maybrook route? There is a small portion of traffic to points in and near the Metropolitan district of the New Haven that is still handled by Communipaw float, and traffic from points on our lines, Allentown and east, to Jersey City in-
921 clusive, is still handled via Jersey City and Harlem River."

The interchange is now divided between Maybrook and Harlem River, but to a very large extent this Harlem River interchange has been lightened and eased out by this transfer to Maybrook.

Witness understands that his road owns a small amount of stock in the Lehigh & Hudson River. He would not call it a substantial interest. Witness believes that the Pennsylvania, the New York Central, the Baltimore & Ohio, the Erie, and the Central Railroad of New Jersey, all have more or less stock in the Lehigh & Hudson. They would not be influenced in any way because when they move their interchange business over the Lehigh & Hudson they are moving it over a road in which they are part owner.

Referred to his Exhibit No. 94, and asked whether he had given any consideration to the question of whether those are the principal shipping points with respect to traffic interchanged with his road, the witness answered:

"No, but I would assume that they were."

Asked whether the same is true of Exhibit No. 93, the witness answered:

"I should say that they are, yes. I know, of course, that Boston, Portland, Fitchburg, Springfield, and Worcester, are points of considerable importance that would make many shipments to those points."

922 Witness believes that the selection of these places was made to show the points of largest tonnage without respect to where it moved, to or from. He does not see why, simply because a place is a place of large tonnage, it does not follow that it is a place of large tonnage interchanged with the Jersey Central.

Asked whether it is much more likely that traffic to and from Fitchburg would move over Boston & Maine's lines to its western gateway rather than down over the New Haven and either through Maybrook or Harlem River on to witness' road, the witness said:

"Why, no, I do not think so. The preponderance of the tonnage is eastbound. The routing would be handled by the shipper, or by the initial carrier, ourselves."

The preponderance of the tonnage interchanged with the Boston & Maine and the Trunk Lines is overwhelmingly with the trunk lines north, and not with witness' trunk lines.

As to the points selected, in so far as there is traffic interchanged between the Boston & Maine and the Jersey Central, the preponderance is at the points indicated.

Referred to his Exhibit No. 90, the witness said that he has not claimed that in no instance does his road get anything in excess of actual mileage. He has made no schedule similar to that of the complainants, to show the excess mileage that the Central New Jersey gets on its side of the junction point. He does not think it is representative. He does not think it shows anything.

Asked whether he has any criticism of the schedule prepared by the complainants, showing excess mileage over actual mileage, the witness said:

923 "I have not attempted to criticize it, Mr. Choate, because I do not think it is representative. It is not typical."

Referred to his Exhibit No. 90, sheet No. 2, under the head of "Maximum distance," the witness said that 204 miles is the present prorating distance. The Jersey Central actual distance is 100 miles maximum actual distance plus 86 miles for the Lehigh & Hudson River, total, 186 miles. Undoubtedly there are a great many places in that block where they are getting a prorating mileage of 204, and the actual haul is very much less, in the same manner as the New England roads are, on any block basis. That is unavoidable.

That particular block of the Jersey Central is about 34 miles long. It contains no important stations, except Wilkes-Barre.

Witness' exhibits deal entirely with traffic originating or terminating on the Jersey Central. Traffic is delivered by the Reading to the Central Railroad of New Jersey at Allentown, which is located between Parryville and Easton. There is traffic also that originates on the Baltimore & Ohio, and goes through Allentown, moves to Easton, and then goes up over the Lehigh & Hudson.

The share of the Central Railroad of New Jersey in the joint rate in such overhead traffic is not indicated by either of these
924 exhibits. The exhibits cover practically the Central Railroad of New Jersey's most important shipping territory.

In the next block, the second block on that page, Scranton is the only point of any importance.

The grouping in Exhibit No. 91 is naturally the same as in Exhibit No. 90, and the same answers would apply. There is a very heavy traffic that comes overhead to the Central Railroad of New Jersey from Allentown to Easton, and thence up the Lehigh & Hudson. It is greater in volume than the local traffic referred to in these exhibits. It is absolutely not some of the most important traffic over the Central Railroad of New Jersey. Witness has not been referring to coal. He has been referring to merchandise generally. Passing-over traffic is not more important to his road than traffic originating on their own line. That must be obvious. Witness means, in point of revenue. The overhead traffic is probably greater in volume, but

not nearly so desirable. That is true of traffic other than coal. In addition to the traffic that has been discussed, there is a movement of coal, anthracite particularly, in which the Central Railroad of New Jersey is the bridge carrier. Witness does not know the extent of it. He does not think it is very heavy. He means over this particular portion of the road between Allentown and Easton.

925 He does not think it is very heavy on anthracite. Originating at points on the Central Railroad of New Jersey, there is a heavy movement of anthracite into New England. It runs from Allentown to Easton. The vast majority of that anthracite moves up through Maybrook.

Witness thinks it is not a fact that this overhead business yields more dollars to the Jersey Central than the traffic originating on that line that is illustrated in these exhibits Nos. 90 and 91. He has not made any study of it and has not the figures. It seems impossible to him that that would be so.

There are no arbitraries involved in any of these rates illustrated, except that of the Boston & Maine and the arbitrary allowance for the floatage in New York Harbor. That is counted in with the New Haven's mileage. The Central Railroad of New Jersey gets no arbitraries on New England traffic. Witness does not know why.

The Potomac Yard is on the Baltimore & Ohio Railroad and the Pennsylvania Railroad, at Washington, in the Alexandria district.

Asked to give as many terminal deductions as he has in his mind that his road gets on traffic moving from his road to any other road, the witness said:

"I suppose I might omit the terminal allowances in New York Harbor. You are probably familiar with those, the lighterage, floatage, etc. To points in Central Freight Association territory,

926 handled via the C. R. R. of New Jersey, Allentown, Philadelphia & Reading Railway, Shippensburg, Western Maryland Railroad, or Cumberland Valley Railroad, now the Pennsylvania Railroad, and the Baltimore & Ohio Railroad, over the Western Maryland Railroad, and the Pittsburgh & Lake Erie Railroad through Connellsville and their western connections, the Central Railroad of New Jersey is allowed an arbitrary of 3 cents per 100 pounds, on all traffic subject to New York rates; and 1½ cents per 100 pounds on all traffic subject to Philadelphia rates."

The arbitrary last indicated is received whether the Central Railroad of New Jersey performs the lighterage or does not perform it. The same terminals are allowed via the Allentown-Shippensburg, Western Maryland route, in connection with the Coal & Coke Railroad, now a part of the B. & O., witness believes. The same is true of the Kanawha & Michigan Railroad, via the same route, and the Ohio Central lines via the same route. Witness will not say that is all there are. There are others.

The Central Railroad of New Jersey gets a terminal of 3 cents on traffic to the B. & O., routed via Park Junction, from stations on its line, Jersey City to Annandale, inclusive, but does not get a terminal

of 8½ cents a hundred pounds on all traffic with the Richmond, Fredericksburg & Potomac Railway. They do not get a
927 terminal of 8½ cents per 100 pounds on any traffic in connection with any line.

If the percentages show such deduction, it is not assigned to the Jersey Central. It belongs, probably, to the line north of the Virginia gateways.

In expressing an opinion as to the adequacy of these divisions for the New England lines, the witness has given consideration, only in a very general way, to the revenue needs of the New England lines. So far as he has considered it, he does not think he would allow anything additional on account of their revenue needs; certainly not from the present percentages.

Asked whether, as a general principle, if the costs on one side of a junction point become permanently greater than they do on the other, that that is a fact to be considered in adjusting divisions, the witness said:

"Well, it depends entirely on what those costs are, and as to the rates under which the traffic on which the divisions are used—how high those rates are. There are many things to be considered besides increased operating costs on one side of the junction point. That is a very large subject."

Asked whether he would treat it as a general principle that if costs upon one side of the junction point have become permanently much greater than the costs for the same thing on the other side, it should be taken into consideration in adjusting decisions, witness replied:

"Only to this extent, Mr. Choate, that if that is to be considered as a factor in readjusting divisions, as, for example, between the New Haven and the Central Railroad of New Jersey, there must be
928 a similar readjustment as between the Jersey Central and its other connections. It cannot stop as between the New Haven and the Jersey Central. There must be a realignment all through."

The principle suggested is entirely different from anything they have ever done in the past. Witness has not really reached a conclusion on it. There is a movement of bituminous coal into New England that is consumed by the railroads there. Witness thinks there is a movement over his line. To what extent, he is unable to say. He has no tonnage figures, and is not conversant with it. On all that his line gets increased freight rates granted by the Commission and the New England lines have to pay the increase. They are no different from the Jersey Central in that respect. It has to pay the increase.

The Jersey Central has no bituminous coal on its lines. Its line reaches Scranton. The bituminous coal fields are not very close.

Witness is not sure that if the level of freight rates is to remain substantially higher than it was when these divisions were made, that will be a permanent added burden on the New England lines that will not be borne in equal measure by the lines west of the Hudson. The

New England lines can get their bituminous coal by water
929 from Hampton Roads and Baltimore. The Central Railroad of New Jersey is dependent practically entirely on rail movement from the bituminous fields. The coal that is moved from Hampton Roads involves a rail haul. Witness does not know that the New England roads will always be at a greater disadvantage than his road. It depends largely on what the water rate is from Hampton Roads. Witness does not know that the increased rate of wages was much greater in New England than it was with his road.

As a traffic man, he does not know of any reason in the world why he should not venture to express an opinion as to whether these divisions were fair. They seem to him to be more than fair. He thinks the conditions of the New England lines, the operating costs and the terminal characteristics, are not very different from those of the Central Railroad of New Jersey. He thinks if any divisions were arranged at the present time they should be based on a block mileage basis, something similar to the comparison he has made in his exhibit. He has given more or less consideration to all of the factors as they have been explained by complainants' witnesses. Prior to hearing them from these witnesses, he had not given any consideration to the increased costs of operation in New England. He knew what the increased costs were only as he had noticed certain reports in the newspapers. He did not know what the increase in New England wages was. He knew about the increase in the cost of fuel only in a general way. He has always had the opinion that these divisions were very much more than fair to the New England lines. None of these considerations that have been
930 brought to his attention has effected any change in his opinion.

Redirect examination:

Referred to the 3-cent arbitrary, for receiving which witness said his road was obligated to perform the lighterage service when it is necessary, and asked whether, when the lighterage service is performed, the 3-cents compensates his road for what they do, the witness said: "Absolutely not, no, sir."

The cost varies with the different materials that are lightered. It ranges from $1.25 to $2 and more per ton. It would run about 6¼ cents to 10 cents or more per 100 pounds. As to a substantial part of the tonnage on which the Central Railroad of New Jersey does get a 3-cent deduction, it is performing a special terminal service that costs it over 6 cents per 100 pounds.

Asked what his opinion is as to whether the 40-mile or 60-mile constructive mileage allowed to the New Haven in all of its divisions, that is, via both Harlem River, where it performs the float service, and via Maybrook, where it does not perform the float service,—whether or not that 40 to 60-mile constructive mileage is liberal, the witness said:

"I think it is very liberal when compared with the allowances that the Central Railroad of New Jersey gets for similar floatage
931 service in New York Harbor. For example, we float from Jersey City to 60th Street, Manhattan Island, New York, at which point we deliver cars to the New York Central; and we float from Jersey City to Long Island City, at which point we deliver cars to the Long Island Railroad. For that service we get 3 cents per 100 pounds. The allowances to the New York, New Haven & Hartford Railroad for floating in New York Harbor have been translated into mileages, and have been included in their percentages. For instance, our first percentage block, from Jersey City to Allentown inclusive, we get 100 miles. The New York, New Haven & Hartford Railroad, for their first group, get 100 miles plus 40 miles float. That 40 miles float, in that case, is equal to about 16½ per cent., taking the first class rate, and 16½ per cent. would give them 10.4 cents per 100 pounds; whereas we would get but 3 cents per 100 pounds for floatage."

This constructive mileage that the New Haven gets on account of the actual float service on the Harlem River traffic, and the imaginary float service on the Maybrook traffic, returns, on some of the traffic, 10 cents 100 pounds to them for a service that witness' road performs every day for 3 cents 100 pounds. In taking the 60-mile allowance for float, for instance, between Allentown and Boston, where the Jersey Central draws for 100 miles, the New Haven draws for
932 200 miles, plus 60 miles arbitrary for floatage. The arbitrary in that case would represent 16.7 per cent., and, on the first class rate of 74 cents, it would give them 12.4 cents per 100 pounds for floatage as compared with the New Jersey Central's 3 cents per 100 pounds for floatage. That has come about from the circumstance that the 3-cent arbitrary that the Jersey Central gets is now the same in amount as it has been for years; whereas, the return that the New Haven gets on account of this constructive mileage being concealed in the rate, has been increased, and the New Haven's revenue had been increased with each percentage increase.

There is no allowance made to the Jersey Central for any bridges that it has. It has, on its main line, a bridge across Newark Bay, between Bayonne and Elizabethport, N. J., which is probably comparable with the Poughkeepsie Bridge route. Witness imagines it is much more expensive than the Poughkeepsie bridge route. The bridge across Newark Bay is 2¼ miles long.

Asked whether he has any information as to the expense of replacing that bridge, which has already been arranged for, the witness said:

"Well, I might say, Mr. Elder, that within the 6 months we have redecked the bridge at a cost of approximately a half million dollars; that for some time past it has been intended, and in fact
933 the plans have been made, to rebuild the bridge and to raise it sufficiently to permit shipping to clear without the necessity of using a drawbridge. That has been delayed on account of

the war, but the expense for that will be in the neighborhood of $14,000,000, as near as we can judge at the present time, and the length of it, including the approaches, will be between three and four miles. That is, I think, fairly comparable with the Poughkeepsie bridge route."

Referred to the dismissal of the case presented to the Interstate Commerce Commission, in connection with the closing of the Harlem River route by the New Haven, and asked the main reason which the New Haven presented to the Interstate Commerce Commission for the dismissal of the case, the witness said:

"The main reason was that we agreed to send a portion of our traffic via the Maybrook route."

The New Haven set up in its brief and argued at length that the complaint should be dismissed because the Commission did not have jurisdiction to deal with the situation. It did not undertake to justify its action on the merits in the proceeding before the Commission.

The Central Railroad of New Jersey would very greatly prefer to have all the traffic move via Jersey City today.
934 In that case it would get the additional revenue that it now has to pay to the Lehigh & Hudson River Railroad. The Central Railroad of New Jersey would be delighted to take over that carfloat service in New York Harbor, if they were allowed the constructive mileage that the New Haven is now receiving. There would be no difficulty whatever in the Jersey Central adding float bridges.

It is the practice of every railroad having carfloat bridges in New York Harbor to restrict the hours very definitely at which it will receive carfloats from each of its connections. That is the only way the terminal situation in New York Harbor can be regulated.

Recross-examination:

The lighterage on which the Central Railroad of New Jersey receives the 3-cent terminal in New York Harbor is not in connection with traffic interchanged with the New Haven. There are no rates between New York Harbor and points on the New Haven in connection with the Central Railroad of New Jersey.

A committee of traffic executives is working on a computation of the cost of that lighterage service in New York Harbor for all the roads there. Witness believes the New England lines are
935 represented on that committee. He is not personally familiar with the figures. It is possibly true that a figure has been arrived at which shows what it is costing witness' road for lighterage, but witness does not know what it is. He has not heard the figures.

D. S. BRIGHAM, heretofore called as a witness on behalf of the complainants, was recalled and testified further:

Cross-examination:

Witness consolidated the figures for the New England roads as to the financial condition of the New England carriers. He has been familiar with the problem of summing up the New England financial situation for several months. He has been more or less in touch with that situation since the fall of 1919.

So far as putting together the revenue needs of the several New England roads is concerned, the witness thinks it has practically all been done through or by him,—purely the summarizing of the statements of individual roads.

Complainants attempted to prepare a constructive year based on October 31, 1919, at the request of the Chairman of defendant's accounting committee. That was made Exhibit No. 62. As those figures had been injected into the case somewhat, witness
936 submitted the total for the roads, in Exhibit form, which was given No. 61.

Since the last hearing, in the light of the criticisms then made of Exhibit 61, witness has decided that in some respects at least that exhibit should be revised. He would like to submit a revised statement of the exhibit, which incorporates those changes.

The paper referred to was received in evidence and marked Complainants' Exhibit No. 61, revised. Witness Brigham.

Asked to indicate the chief elements in his computation that he had changed, the witness said:

"There were a number of changes made. The only important changes, I believe, were in the Boston & Maine and the New Haven figures. The most important deduction in expenses was that of the effect of the labor award, to which some attention was called in my previous examination, and it developed that the figure used in these estimates for the effect of the labor award was a figure which was not confined to any particular year, but was based on the effect, as indicated by one or several months of retroactive time paid in 1920; and that, while the figures used in the June 30, 1920, adjustment were substantially exact as relating to the particular payroll for that period, that did not hold true of these figures, which were prepared rather more hurriedly for the October 31st
937 year. There were some other minor changes, but I think the principal one was the labor award. There were some other deductions and some other additions.

"The October 31st statement, in the case of one or two roads, involved some confusion on account of their being asked to submit it in the questionnaire form, like the questionnaire used in Ex Parte 74. That was divided into Exhibits A and B, with regard to which there were some matters of controversy at the time among accountants, and it involved some question as to where certain elements of non-operating income went. Those adjustments have been taken care of in this revised statement."

Witness thinks that it is not a fact that the exhibits Nos. 1 and 3, based on the constructive year, June, 1920, would also necessarily

be revised somewhat because of the same miscalculation of the wage award that leads him to revise Exhibit 61. He thinks they had that checked up, and he submitted the details for the individual roads. They found that, applying the suggestions that were made as to the computation of the labor award to that year, that either they had been made in that particular way, or, if they had been made in some other way, they checked up very closely with that test,

938 either taking the percentage of increase in the various grades of employees, or applying the increase per hour to the man hours for that particular year. It was very close to the figure that was included in that year.

The only occasion witness sees for revising any of his exhibits is the revision that he is now suggesting and which he has filed as Exhibit No. 61, as revised.

Witness submitted Exhibit No. 62 with a note at the time that the Bangor & Aroostook figure was subject to revision. He has the revised exhibit No. 62, with the Bangor & Aroostook figure modified.

The paper referred to was received in evidence and marked Complainants' Exhibit No. 62, revised, Witness Brigham.

There are no other changes in that exhibit except that one figure, which they could not obtain before. Outside of that, witness has not felt that there was sufficient change to warrant any revision. They have attempted to show, in submittting working papers, how these figures were made up, but they have not suggested any changes in the statements.

Witness thinks that Exhibit 61, as revised, is a fair and conservative statement of what the results would be of doing over again the business of that year, at the rates and wages and price levels which obtained in the fall of 1920. That is what it purported to be.

Asked whether the fact that they had assumed that the revenue increase realized by the Boston & Maine would be not the

939 40 per cent. increase that was authorized, but only a 37 per cent increase, vitally affected the whole situation, the witness said:

"It affects the conclusion to the extent of that 3 per cent. in revenues. It is my belief that that 37 per cent. is a conservative estimate of the revenue that would result for that constructive year. I will very frankly state that on previous examination some question was raised as to the foundation for that reduction of 3 per cent. in the rate increase, and I stated that it was made purely as an estimate. It was originally made for our own information.

"I explained what, so far as the Boston & Maine is concerned, were the three items, which I believed would enter into that. Now, as requested, we have made a detailed analysis of those three factors, and the result of that detailed analysis has been to support the theoretical deduction of 3 per cent.

"Taking those three factors, which I explained would probably affect the total revenue, we have computed that, based on those theoretical factors alone, the increase in all revenue would be 38.47 per cent. Now, I do not mean to say that that is absolutely correct.

It involves several factors which would require an enormous amount of work to analyze in detail. It would practically mean going over every waybill.

"So far as the factor involving the differential rate from
940 New York is concerned, that amounts to .82 of one per cent. out of the theoretical deduction of 1.53 per cent., or about half of that total."

Witness estimates that their loss on that differential business was $359,990. Another item was the loss on account of the interterritorial rate, which was held down to 33⅓ per cent. in some cases. That, as included in their estimate, amounts to $177,567, or .404 of one per cent.

Witness heard Mr. Kallman's testimony this morning. He believes Mr. Kallman made the statement that there were very few, if any, rates between New England and the West that did not break at the Mississippi River. They would not suffer on interterritorial business to and from the West if the joint rates broke at the boundary. This estimate was prepared from an exhibit which showed the business going to the various territories out of the Eastern Group, and in that statement any business which moved on rates breaking at the boundary was included either in Trunk Line or C. F. A. tonnage and revenue. Now, it was pointed out that that statement was based on the month of October, 1919, and that at that time a large proportion of the business, if not all, was moving on through billing, and that therefore that condition would not be true today.

Witness has discussed that since with their auditor of rev-
941 enue, and it is his opinion—which cannot be verified exactly without a great deal of study,—that a large proportion of this particular business still moves on joint rates; but, witness should have to say that of that practically 4/10 of 1 per cent. which is represented by that factor, 13/100 of 1 per cent., representing the transcontinental business, witness believes, entirely or almost entirely, moves on joint rates. The balance amounts to 27/100 of 1 per cent. That includes the Southern and Western. Witness is told that the Southern fruit traffic moves on through rates. He cannot verify that; but, of that 27/100 of 1 per cent., a portion of it may not move on joint rates, and may be subject to the 40 per cent. Witness cannot say how much.

Asked whether, taking into account those factors he has mentioned, he thinks that of the total traffic moving between New England and the West and South, more than 25 per cent. moves on through rates, and whether 25 per cent. is a illberal rather than a conservative estimate, the witness said:

"I am not qualified to make any estimate of that, Mr. Elder. I will have to say that the 27/100 of 1 per cent. may—I cannot say what portion of it may or may not move on through rates."

There may be a substantial part of the 27/100 of 1 per
942 cent. which in fact moves on combination rates. Witness cannot say how much.

Asked what he is going to do about his estimated loss of $177,000 on interterritorial business which was based on the assumption that his line lost on every ton of freight interchanged between New England and the South and West, and whether he is going to let that stand, the witness said:

"I have just said that as a purely theoretical proposition, that $177,000 represents 1/10 of 1 per cent.

Asked whether he thinks the deduction of $177,000 from the Boston & Maine revenues alone is a fair estimate, and what a fair estimate would be, in place of that $177,000, the witness said:

"I do not know just what proportion of that is due to that business. I am perfectly willing to admit that, based on these various factors, it does not show more than 1½ per cent. reduction, and that that may be modified perhaps another ½ of 1 per cent., or somewhere in between. I am still of the opinion that the 37 per cent. is a very conservative estimate of the increase that was actually realized.

"I mean that the revenue for the 3 months after the rate increase took effect, the revenue per ton mile of the Boston & Maine, was increased only 27.3 per cent. I believe that that, as well as these theoretical computations, should be given some weight in
943 making an estimate of what we may expect."

On the theory that the conditions as to volume of tonnage and such matters for the year ending October, 1919, will be reproduced, and applying to that tonnage and those conditions the present level of prices, wages, rates, etc., witness would concede that instead of a 37 per cent. increase, he should have taken into account an increase of 38½ per cent.

Witness does not think that on the theory on which he prepared the exhibit, he should revise that Boston & Maine figure, merely on account of this one item, by adding to the alleged net of the Boston & Maine at least $750,000.

The 37 per cent. was an estimate. In the best judgment of complainants' accounting people, that 37 per cent. is very conservative. The actual ton mile revenue for these last 3 months, under the new rates, only increased 27.3 per cent. Witness will grant that that was due to probably a variety of factors; but the fact remains that they are not realizing a 40 per cent. increase; that a 13 per cent. reduction amounts to millions, instead of to hundreds of thousands, and it is their best judgment that that 37 per cent. is conservative.

Witness believes that there are undoubtedly other factors which have resulted in failure to obtain the full 40 per cent.; but
944 he has not been able to develop any analysis of the quantitative value of those other factors, and, based on the purely theoretical computation, he cannot support the 37 per cent.; but he believes that the ton mile revenue that is actually being enjoyed should be given some weight in an estimate which, as he originally stated, was purely an estimate.

In so far as the theoretical computation is concerned, witness is

willing to take 38½ per cent. as a fair estimate. He does not acknowledge that no weight whatever should be given to any other factors. He has given all the factors he has in mind. The figure, on this computation, is certainly 38½ per cent. increase instead of 37.

These working papers were not prepared by the witness, and he would not undertake the responsibility to say that they are accurate.

Witness knows that the gentlemen who prepared these statements for the various roads have done it with the intention of showing up the situation as it exists, and, in most cases, they prepared for their own executives the same sort of exhibits before this case was begun, and he is sure that they have used their best effort to represent the situation as it is. He would like to point out right here that
945 there is no estimate—and he is sure that will be borne out by defendants' own accounting officers—that it is a very difficult matter to make any estimate of what is going to happen based on what has happened in the recent past. There has been no really normal period of any length on which an estimate can be based. These New England roads have prepared exhibits from time to time. Some of them vary, somewhat, but they all show the conditions to be substantially the same.

The computation of the 3 per cent. was prepared by Mr. Turner.

Referred to his Exhibit No. 61, and asked whether the inference is warranted from that exhibit that the Rutland is not going to meet its fixed charges during the current year, the witness said:

"I should say, from that exhibit, that it was extremely doubtful whether they would or not."

Asked whether he is prepared to say that the alleged deficit of $38,000 shown opposite the Rutland on that exhibit is an intelligent or at all reasonable estimate, and whether he can, of his own personal knowledge, vouch for the reasonable accuracy of the figure, the witness said:

"I would say that the auditor of the Rutland Railroad, who prepared these figures, is here. I am prepared to vouch for his intelligence, and let him testify as to the reasonableness of it."

946 Witness has not gone beyond the figures.

Witness' estimate of 38½ per cent. assumes that the Boston & Maine will lose $130,000 on account of the arbitraries not being increased 40 per cent. It was not taken into account in this estimate that the arbitraries eastbound were not increased 40 per cent., but 100 per cent., because witness is taking, instead of 1 cent, 2 cents. Witness does not think it has any bearing.

Asked whether, if he took it into account, it would not appear that the Boston & Maine during the current year, instead of losing $130,000 on account of the treatment that their arbitrary is receiving, would gain, net, in that connection, $163,000, the witness said:

"I do not see that, no. So far as this eastbound arbitrary was concerned, I suppose you refer to the fact that the Boston & Maine,

on what was considered their proper share, increased that to 2 cents instead of 1½ cents. 1½ cents represents roughly 40 per cent., and the other ½ cent represents prior increases. So far as the effect of this particular 40 per cent. is concerned, I do not think that that ½ cent, which was added for previous increases, and which was done some time in 1919, has any bearing on the theory of 40 per cent. increase in this case."

947 It is true that throughout the entire basic year with which this exhibit alone deals, the Boston & Maine eastbound arbitrary was only 1 cent, for the year ending October, 1919.

Asked whether he had not overlooked the fact in his calculations that during the constructive year, instead of getting one cent, that was received on the basic year, they were getting 100 per cent. greater than 1 cent, the witness said:

"We have gotten it for some little time. Judging from what the witness said this morning, strong efforts are being made so that we shall not retain it. We have not gotten that money by agreement. You are familiar, from the testimony, with what the status of that terminal is. It has not been allowed. It is not like an order of the Commission, which allows a rate increase. If we retain that money permanently, it would amount to ½ of 1 cent over and above 1 cent, due to the prior increases, certainly."

Asked whether, if they were getting 2 cents during this year on all the eastbound differential traffic, then it would follow that his revenue in the estimate should be increased to rather over 39⅓ per cent., the witness said:

"I do not think it would have any effect on this percent at all, because that ½ cent per 100 pounds, if it is allowed to be re-
948 tained, represents a condition which began long before this 40 per cent. increase in rates was allowed. If that belongs anywhere, it belongs in an adjustment of that amount on the basic freight revenue of that year.

"So far as the October 31, 1919, year goes, assuming that we are to retain that money, that amount should perhaps be added on to the total revenue. So far as the June 30th year goes, which was put in in our Exhibit No. 1, there were at least 7 months of that year that ½ cent is included in the basic figure."

½ cent 100 on the eastbound business would amount to about $260,000, as to the traffic on which that terminal is deducted.

If the propriety of adding the ½ cent under this particular adjustment is admitted, that would be slightly over 39 per cent. The revenue of the Boston & Maine for the basic year ending October, 1919, on freight, was about $44,000,000, and 2 per cent. of that would be $880,000.

Witness believes that the 37% is a conservative estimate taking into account the actual results that are developing. Based on this purely theoretical computation, if that were the only ground on

which the 37% was arrived at, that reduction might not be made.

In making the New Haven's estimate, it was assumed that the freight revenue of the New Haven was increased only 37 per cent. That was also true of the Central New England.

949 Witness is not prepared to testify to the estimate that the New Haven would realize less than 39 per cent. of the 40 per cent. increase. The New Haven has put on a witness who will testify to their figures. Witness thinks that 37 per cent. appeared in the original estimates which were submitted prior to the time the cross-examiner cross-examined Mr. Palmer of the New Haven, and witness would prefer to have Mr. Palmer answer that.

Referred to Exhibit 61, and asked whether he could justify the Boston & Maine figure, the witness said:

"I would say I have not attempted to justfy by exact computation the entire deduction of 3 per cent. from the 40 per cent. increase. I would say that it is my belief, based on the judgment of the officers of the road, who should know, that that 37 per cent. is a conservative statement. If we had not felt that it was, we would certainly have revised the estimate."

The New Haven's estimate, as Shown on Exhibit 61 revised, includes an adjustment described as "additional depreciation," which item amounts to $1,430,000. It is like all these adjustments. It is an item which is in addition to what was reflected in the basic year. Looking under operating expenses of the New Haven, one of the adjustments included is described as "increased cost of fuel, including increased freight charges," and that adjustment on

950 New Haven fuel is $4,701,572.

Witness would prefer to have Mr. Palmer testify to these New Haven figures.

The New Haven operating revenue for the year ending October 31, 1919, was $48,081,750, and the adjustment was $16,732,607. It apparently includes an adjustment on account of the Anderson scale, and then, on top of that, the effect of Ex Parte 74, estimated at 37 per cent. Witness does not know what the net per cent. would be.

The Interstate Commerce Commission's reports for the three months, September, October and November, 1920, show the New Haven's freight revenue increased over the same period last year, 23.5 per cent.; Boston & Maine, 24.3 per cent.; Baltimore & Ohio, 43.5 per cent.; Central Railroad of New Jersey, 40.8 per cent.; Delaware & Hudson, 48.7 per cent.; Delaware, Lackawanna & Western, 43.9 per cent.; Erie, 41.6 per cent.; Lehigh Valley, 31.1 per cent.; New York Central, 42.6 per cent. That simply shows the freight revenue for the three months, September, October and November; Pennsylvania, 45.9 per cent.; Philadelphia & Reading, 55.0 per cent., and Pittsburgh and Lake Erie, 91.8 per cent.

Witness obtained these figures from the summary that the Interstate Commerce Commission puts out every month. They

951 show the results for each month and the accumulated total. If a road handled a much greater tonnage, it might show a

much greater increase on that basis than some other road which handled a less tonnage. The mere tonnage would affect that comparison.

Witness does not believe that the P. & L. E. had their rates increased 91.8 per cent., but he thinks that is significant of the earnings of these New England roads under the new rates.

Referred to Exhibit No. 62, and asked whether he had examined the working papers underlying that exhibit, the witness said that he had been over the explanation furnished by the different roads, in a general way, as to how they prepared that estimate. He does not know of any respect in which he wants to revise it.

Witness submitted a revised statement which corrects the alleged deficit of the Bangor & Aroostook below fixed charges of $980,000, and which shows that the alleged deficit was only $380,071.

Witness has not noticed that these working papers are assuming that the tonnage of several of these roads and, therefore, their revenue, will be substantially reduced, and yet no reduction whatever is made in the operating expenses. As far as he has noticed,
952 he has found that there has been a reduction made in operating expenses.

Witness' exhibit No. 62 purports to be a forecast for each of the New England roads for the year ending August 31, 1921, based on the last four months' results, and what current indications are as to what will develop during the next few months.

The Boston & Maine computation is based on the freight revenue for the first three months — the first two weeks of December, 1920. The two weeks of December showed a decrease in tonnage of 18 per cent., and it was assumed that that decrease in tonnage and freight revenue would persist for 8 months. The developments since those two weeks in December have not been such as to indicate that they were unduly pessimistic in that estimate.

The actual figures for the first three months and the revenue figures for the fourth month, December, were used as a basis of estimating what might happen during the next few months; and it was assumed that the volume of business would be reduced 18 per cent. The passenger revenue was only estimated at a decrease of 10 per cent. The total payroll was decreased 10 per cent. for the balance of that period, as compared with the preceding year. On other materials—other than ties, rail and fuel—an estimate of 20 per cent. decrease was made. On coal, a decrease of 10 per cent. in consumption was figured, and a decrease in price to an aver-
953 age of $7.50 per ton. The price for the corresponding months of the previous year was $7.68. The price of coal, of $7.50, was the best estimate that could be made of what coal for the next 8 months could be purchased at. The price of coal was based on 10 per cent. less consumption than the amount used in the corresponding 8 months of the previous year, at an average price of $7.50 a ton.

The New Haven, during the year 1920, received 1,435,724 tons of coal all-rail, and 850,917 tons by tidewater.

Redirect examination:

Asked to straighten out this confusion which has arisen about the submission of the constructive year, June 30, 1920, and the constructive year, October 31, 1919, the witness said:

"Our original Exhibits Nos. 1 and 3, in which we attempted to show the operating results of the several New England roads and their deficit after fixed charges, were based on the constructive year ended June 30, 1920, which was adjusted to the levels of rates, prices, and so forth, in effect up to a certain time before the exhibits were presented.

"Early in December the trunk lines, in preparation for this case, asked all of their roads to prepare a constructive year taking
954 the same year that was used in Ex Parte 74, the year ending October 31, 1919, and bring them up to date.

"In a conference with representatives of the accounting committee of the Trunk Lines after the first hearing, it was suggested that, as they would like to have us also furnish this October 31st year and we had not presented all of the details on the June 30th year, we might save time by simply presenting the October 31st year in detail. Therefore, that year was made up in about two weeks and presented at the next session.

"It was then found that the counsel for the defendants preferred to examine on the original estimate as submitted for the constructive year ended June 30th, and for that reason it was necessary for us to submit further details on the June 30th year, which has been done duing the adjournment of the past three weeks."

Detailed figures on the June 30th year have since been submitted. The trunk line accountants were told that they were at liberty to examine the details of any of the New England roads' exhibits. It was not possible to bring everything to Washington. So far as witness knows the only examination which has been made was that of some of the exhibits of the New Haven. The trunk line accountants have not, so far as witness knows, been to the Boston & Maine or any other road.

With regard to the 1-cent arbitrary, the Boston & Maine has made claim that the 1-cent arbitrary should be increased to 2 cents because of the various rate increases that have taken place since it was established. That claim has not been agreed to. The status is that the Boston & Maine are now asking 2 cents on eastbound business, and on westbound business the Trunk Lines are accounting
955 to them for 1 cent. It has been the subject of discussion and negotiation, and has been submitted to some auxiliary committee appointed by both sides. Witness does not know the name of the committee. The status of the thing is this: That unless the parties agree, it is a matter which can be dealt with only by the Commission. The parties have not reached an agreement. So far as witness knows, they are just as far apart as ever.

If the terminal stays at 1¢, the trunk lines are receiving more

than 40% of an increase and the Boston & Maine is receiving less. If it is raised to 2¢, the Boston & Maine gets a little short of the increases which have been allowed—5, 15, 25 and 40%. These increases would raise it to 2.11¢, witness believes.

Asked to state just exactly how he wishes to leave his testimony about the 37 per cent. realized, the witness said:

"It is their [the accounting officers of the Boston & Maine] best judgment that that is a very conservative estimate of the amount of increase received over the basic year as a result and after the 40 per cent. increase."

On the other hand, witness says that when you come to figure out certain details which would support their deducting their 3 per cent. from the 40 per cent., they cannot sustain a 3 per cent reduction.

Asked just how he reconciles those two views, the witness said:

"Why, the judgment of the accounting officers in support of the 37 per cent. is based on their knowledge of what actually is being realized in increases in revenue, and it seems to me that it is proper in an estimate for these factors to be taken into account. If it has got to be a question of absolute mathematics, it is not possible
956 sible to give an absolute value to it. I stated originally in my testimony that that 37 might be 36 or might be 38, but that was the best estimate they could make."

It is possible that the proportion of interterritorial business is larger at the present time than it was in 1919, but witness has not any data to show whether it is or not. He knows that their revenue is showing increases very substantially less than 37 per cent—their revenue per ton mile. The failure to get the benefit of the 40% on the one cent would account for part of it.

Witness thinks the third factor was maintaining the differential of the Boston rate group over New York at a fixed figure. That resulted in a loss which was estimated to be something over 8/10 of 1 per cent. That was the largest individual item in that computation. That is a differential of 7.2 on eastbound business on Chicago. Witness believes it is 5 and something on Buffalo. The fact that the base rates were increased by 40 per cent and the existing differential maintained resulted in the failure of the New England roads to realize the full 40 per cent on that business. In the estimate of the constructive years based on October 31, 1919, or June 30, 1920, they made no allowance in these figures for undermaintainance in those years.

Asked whether, with respect to renewals of ties and rails, maintenance charges were very much below the normal, the wit-
957 ness said:

"I only know, personally, about the Boston & Maine. I know that in both the year ended October 31, 1919, and the year ended June 30, 1920, the number of ties, for example, installed was below the average.

"Now, as for the year ended October 31, 1919, it was less than 600,000. The year ended June 30, 1920, it was something over 600,000. Now, the normal annual installation of ties on the Boston & Maine is about one million and a quarter, showing that for both of those 2 periods there was a deficit in installation of ties of over 600,000. At a dollar a tie, that would be $600,000. At $2 a tie, that would be $1,200,000.

"The price for the next year will be nearer $2 than $1.00. The laying of 600,000 ties, instead of a million and a quarter ties, would naturally involve a great deal less labor, and the man hours for that year would be much less than they would in a normal year. But we have not made in our adjustments any allowance for that factor. I think perhaps we should have, but we did not.

"That simply means that, of whatever value those constructive years may be in estimating what is going to happen, the results are too favorable by whatever maintenance was omitted from those years."

958 Asked whether in his judgment this forecast which is revised Exhibit No. 62, was made with conservatism or with exaggeration, and whether he had tried to make the figures larger than he thought were justified, or had tried to do the contrary, the witness said:

"We have tried to be conservative. I speak more particularly for the Boston & Maine on that exhibit. After that exhibit was prepared by the accounting and traffic departments, I asked the general manager to check it up and see what his independent judgment would be. The result of his investigation was considerably more unfavorable than the estimate that was the basis of that exhibit. We certainly do not want to make these estimates any worse than we think the results are going to be."

The results of operation, as they come in from time to time, certainly do not give witness any reason to hope for any better situation than is reflected in these forecasts. Attention was called to the fact that on the Boston & Maine they assumed that the falling off in volume that had occurred during the first two weeks of December would continue through the rest of the year. Of course, nobody knows whether that is going to continue or not, or whether that will be the average reduction; but the first two weeks in January for the Boston & Maine show an actual reduction in freight revenue,
959 as compared with the same two weeks of last year, of 14 per cent. If they consider that the freight rates have been increased by 37 per cent., that represents a reduction in volume of business of over 40 per cent., instead of 18; between 40 and 50 per cent. They certainly hope that that condition is not going to continue, but there has not been anything developed since these estimates were made which did not indicate that, so far as portraying their prospective situation is concerned, they were conservative.

In estimating what would have to be paid for fuel coal, they first made a deduction of 10 per cent. in the amount to be consumed,

and then that they would make a saving over last year's price. The reduction in the price estimated was from $7.68 to $7.50. That reduction is rather small, but that reduction is made from the average price in effect for the eight months ended August 31, 1920. The first few months, December, January, February, the first few months of 1920, the increases in coal prices which were such a serious burden this past year had not begun to become effective. They did not begin really to have effect until along in the spring. Then, of course, the 40 per cent. increase in freight rates, which are a considerable item on their coal, did not take effect until the latter part of August, 1920. As far as the estimate for next year
960 is concerned, $7.50 per ton may seem a little high in the light of the present what might be called soft condition of the coal market; but in using that figure it was taken into account that the coal year as a rule ends on April 1st, and that a large part of the consumption was contracted for at prices which are, of course, higher than prices at which contracts could be made at the present time.

Those contracts in most cases run until April 1st, and if the contracts did not cover the entire consumption, of course this slump in business which has reduced their coal consumption would have a tendency to wipe out any margin between the amounts covered by contract and their consumption. So that there would be a very small amount which they might be able to buy in the spot market.

Then, of course, they normally have a supply on hand, especially in winter, of at least a month, and it would mean that, if they do enjoy prices for the rest of the succeeding year at less than $7.50, that is, taking into account the portion coming in by water and part by rail, they would not begin to feel the effect of those prices until some time after May 1, 1921.

In computing their fuel cost, on account of the increased freight rate on coal for their own consumption, witness has not limited his computation to coal which comes in by rail only. That was
961 figured on the all-rail proportion—that was figured on the all-rail rate up to their gateway for such freight charges as were incurred on all-rail coal and also on the rail portion of the rate on tidewater coal,—simply what they actually had to pay.

The estimate of $7.50 per ton is based on part rail and part water coal for the Boston & Maine, and witness' recollection is that they have figured that, even with a reduction in the water freight rate—a considerable reduction in the water freight rate over what it has been—their water coal will cost them at the eastern end of the line over $1.50 more than their coal would cost at the western gateways of the road. As things are now, they cannot save anything in the rate by getting their coal by water. The question is one of distribution in times of heavy business, using the eastern gateways and relieving the western gateways, and leaving them free to handle the commercial business that ought to be handled. The witness thinks that for a number of years the water-borne coal has been the more expensive.

Recross-examination:

Witness' Exhibit No. 63 shows that the New Haven, based on witness' forecast for the year ending October 31, 1921, will fall $15,-867,468 short of meeting fixed charges. During the last year
862 over one-third of the New Haven's fuel supply reached it by water.

The working papers of the Bangor & Aroostook, on which witness got the apparent deficit down to $380,000, assumes a 10 per cent. reduction in freight revenue from January 1st to August 31, 1921.

It does not always follow that because their freight traffic falls off 10 per cent., there would be a reduction in damage claim.

The working papers indicate that the Bangor & Aroostook has assumed it would have to pay $10.44 per gross ton, which is about $9.50 a net ton for fuel coal for the year ending August, 1921.

Adjourned to Thursday, January 27, 1921, at 9:30 o'clock A. M.

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Washington, D. C.,

Thursday, January 27, 1921—9.30 a. m.

AUGUST L. SORENSEN, called as a witness by the defendants, testified:

Direct examination:

That he is Comptroller of the Erie Railroad Company.

That he prepared six sheets based on some of the exhibits of Mr. Brigham and some of the exhibits of Dr. Cunningham, showing the figures taken from those exhibits for the seven New England roads, and in one or two cases eight New England roads, according as the Brigham or Cunningham exhibit was made, and adding thereto a separate column showing the same information on the same basis for the Erie Railroad Company, including the Chicago and Erie Railroad Company.

The sheets referred to were received in evidence and marked Defendants' Exhibits Nos. 96 to 101, inclusive, witness Sorensen.

Asked to take those exhibits, commencing with No. 96 and ending with No. 101, and give as briefly as possible an explanation of what they show, dealing with the ultimate result on each one, without going into details, the witness said:

964 "Exhibit No. 96 is prepared in the same manner for the Erie and Chicago & Erie as Brigham No. 1 was prepared for the New Haven and the seven New England roads, showing the property investment as of October 31, 1919, including materials and supplies; showing what a 6 per cent return thereon would amount to; showing the average net railway operating income of the Erie, including the Chicago & Erie, for the test period; showing the deficit that arose from the operations of the Federal administration of these

properties during the 26 months of Federal control; showing the estimated net railway operating income based on the traffic for the year ended June 30, 1920, adjusted to present transportation rates, present rates of pay and other charges, and the per cent estimated return on property investment, the latter figure being 1.64 per cent.

"Erie Exhibit No. 2 is prepared in the same manner as Brigham Exhibit No. 3 was prepared for the New Haven and the seven New England roads, and shows similar items for the Erie, including the Chicago & Erie, based on the adjusted year ended June 30, 1920; fixed charges, non-operating income, leaving net fixed charges to be met out of operating income, net railway operating income being brought over from Exhibit No. 96, and showing the amount of $3,-
169,727, which represents the amount by which the Erie and
965 Chicago & Erie will fail to meet fixed charges.

"Exhibit No. 97 is based on the traffic for the year ended June 30, 1920. This is an adjusted year for June 30, 1920, merely because Mr. Brigham used an adjusted year. We had the actual figures for that year, Mr. Examiner, and applied against them the increases under Ex Parte 74, the increases in wages on account of Labor Board Decision No. 2, increases account of per diem charges, increases in price paid for the use of refrigerator cars, and increase in the rate for per diem, and restated it in its entirety to as nearly as possible the conditions as of this time. This was to accord and be comparable with the exhibit presented by Mr. Brigham.

"Erie Exhibit No. 98 was taken from one of Dr. Cunningham's exhibits, and shows the same information as was shown on his exhibit for the New Haven and the eight New England lines, for the Erie, including the Chicago & Erie, and shows the operating revenues, operating expenses, net operating revenues, and the operating ratios for maintenance of way, maintenance of equipment and transportation, and the net Federal deficit for the entire period of Federal control.

"Erie Exhibit No. 98 also shows the standard return for the 26 months of Federal control, and the per cent of net Federal income
to standard return for the various roads, except for the Erie
966 and Chicago & Erie it shows no per cent, as the operations for the period of Federal control showed a deficit.

"Erie Exhibit No. 99 is taken from the Interstate Commerce Commission monthly publication of revenues and expenses of roads having operating revenues in excess of $25,000,000 for the calendar year 1919; and, as in all other instances, the Erie in this case includes the Chicago & Erie Railroad Company. This includes the calendar year 1919 and the year 1920, so far as the statement shows it. It shows the freight, passenger and total operating revenues; expenses, divided between maintenance of way, maintenance of equipment and total; and the net railway operating income, comparing the Erie (including the Chicago & Erie) and the New Haven, for the three months September, October and November, 1920 and 1919, and the eleven months. For the eleven months of 1920 as compared with 1919: for the Erie, total operating revenues, $110,670,055, as compared with $114,662,960 for the New Haven.

"The Erie, including the Chicago & Erie, shows a deficit of $11,873,957; the New Haven a deficit of $9,448,332.

"Erie Exhibit No. 100 was prepared in accordance with Mr. Brigham's Exhibit I-24, and shows for the test period, for the three years, the Erie operating revenues of $209,570,206, and total op-
967 erating expenses of $151,789,587. The figures below, in the test period column for the New Haven, seven New England lines, and the trunk and C. F. A. lines, are averages per annum for the test period, and show the per cent in each instance of the maintenance of way and structures, maintenance of equipment, and transportation, of the gross operating revenues."

The figures in the column "Per Cent of Revenues" under the heading "Test Period," are not affected by whether the figures under the column "Amount" are stated as averages or as the totals for the test period. The relation would be the same in either case.

Under the column "Control Period," they are all totals, for the Erie, New Haven, seven New England lines, and trunk and C. F. A. lines. They are all totals. The ratio of the total operating expense for the control period, for the Erie, New Haven, seven New England lines, and trunk and C. F. A. lines was as follows: For the Erie it was 97.34; for the New Haven, 87.6; for the seven New England lines, 91.5; for the trunk and C. F. A. lines, 87.6.

Erie Exhibit No. 101 was prepared from exhibits of Mr. Brigham, M-27 and N-28, and shows the tone of fuel consumed during the calendar year 1919 by the Erie (including Chicago & Erie),
968 New Haven, eight New England lines, and trunk and C. F. A. lines. It also shows the average cost per ton for each of these lines for the calendar year 1919 and also for the month and period ended August 31, 1920. The average cost per ton for the Erie (including the Chicago & Erie) for the calendar year 1919 is $3.02, and for the New Haven $4.52; for the eight New England lines, $5.03; trunk and C. F. A. lines, $3.10.

For the perod ending August 31, 1920, that increased, for the Erie and Chicago & Erie, 69 cents per ton; for the New Haven, $2.76 per ton; for the eight New England lines, $2.34 per ton; for the trunk and C. F. A. lines, 69 cents per ton.

The figures for the period ending August 31, 1920, would not contain any substantial amount of the freight increase under Ex Parte 74, because the rates only became effective on August 26, 1920, and these prices at which the coal is charged out,—there would be very little if any possibility of that coal getting into the charged out coal through operating expenses. The figures include the freight on coal. They include the cost at mines, plus foreign freight charges, and cost of placing on the tenders, that is, the handling. If the coal comes in by water they would cover the water freight.

969 Cross-examination:

"Average Cost per Ton (Note B)," is for the eight months ended August 31, 1920. The "Average Cost per Ton" above that is for the calendar year 1919.

The Erie's investment per mile of road is somewhere around $207,-564.

Asked whether for the period shown on his Exhibit No. 96, if his road had the same investment per mile of road as the seven New England lines, its railway income would show quite a handsome return, the witness said:

"Yes—there would be a great many questions that would have to be taken into consideration there, Mr. Choate; for example, the question of whether or not all items charged in years prior to 1908 to operating expenses were properly chargeable to the property, the amount of equipment owned, the amount necessary to handle the traffic on your line, and a number of other matters that would have to be given serious consideration, as I see it, before any definite conclusion could be derived from any such principle."

Asked whether, in comparing the Erie with the New England roads the very heavy capital investment per mile of road of the Erie makes its percentage on property investment look small always, the witness replied:

"Yes. As your property investment increases and your
970 net income decreases, the percentage would naturally decline."

The property investment of the Erie Railroad, including materials and supplies, is $477,000,000. In round figures, its stocks and bonds amount to $470,000,000, the bonds to about $300,000,000 in round figures.

Referred to his Exhibit No. 99, the Witness said that in 1919 the New Haven had net railway operating income to go towards the payment of fixed charges of $6,000,000 and over; the Erie had $800,000. In 1920, the New Haven, instead of having anything to go toward fixed charges, had a deficit of $9,448,000, and the Erie had a deficit of $11,873,000. From those figures, the New Haven in that year shows a much worse comparison than the Erie. It suffered much worse by whatever has come to pass in that time than the Erie has. But, in that connection, consideration must be given to a number of other factors. 1919 was a period of Federal control. The question of methods of accounting affected that to some extent; witness does not know how much. It may not have affected the New Haven any more than it did the Erie. It may have affected it considerably more, witness cannot say.

Witness has heard rumors that the Erie had traffic diverted during Federal control. He does not think that the Erie was used for the haulage of coal very largely during the control period.
971 He does not know that it was used for any particular classification of traffic any different from its general classification of traffic, except that on account of regulations by the Fuel Administration, it did lose some coal traffic. Whether other traffic took its place, Witness does not know. Witness does not know where that coal traffic went to from his road. It was not eastbound coal.

Referred to his exhibit showing that the operating expenses for maintenance of equipment of the Erie during the test period is 20.17, for the trunk and C. F. A. lines, 18.3; for the New Haven, 14.0, and for the seven New England lines, 13.8, and asked whether he knows any reason why the per cent should be less for the New Haven and the New England lines than for the Erie or for the Trunk and C. F. A. lines, the witness said:

"Not definitely, Mr. Examiner, except that I assume that the New England carriers would have less equipment and therefore have a larger charge under per diem and mileage, proportionately, than the trunk and C. F. A. lines, rather than having it charged in through their own equipment accounts."

Witness assumes, without knowing definitely, that the lesser percentage in maintenance and equipment is due to their not having the equipment to maintain, that is, the New England lines. No
972 one has claimed that the New Haven had any shortage of equipment. Witness does not know definitely. That is an assumption on his part from the basis of these figures.

Witness notices that the New Haven percentage of expenditure for maintenance and equipment, 14.0% is very close to that of the seven New England lines, 13.8%. That would not change his assumption.

Asked whether if the New Haven has plenty of equipment and its outlay for maintenance on that feature is 14% and the average of the New England lines is 13.8%, his argument would hold to the effect that the difference between that percentage and the percentage of the trunk lines is because per diem goes into profit and loss or some other account, witness replied:

"Per diem would go into a different account, but I do not gather from anything you have said, Mr. Choate, anything that would change my assumption, until I get some facts up."

The statement that the expenses of the maintenance of way and structures for the New Haven during the test period, 11.1, and maintenance of way and structures for trunk and C. F. A. lines, 11.1, would indicate that it cost no more out of the dollar to maintain way and structures on the New Haven than on the trunk and C. F. A. lines, although, of course, it does not show in the comparison as between the two districts as to what they got for their 11.1 proportion of the dollars of gross revenues expended.

Redirect examination:

The transportation ratio on the Erie during the control period was 50.64 per cent; on the New Haven it was 48.2 per cent. The Erie is included under the last bracket as one of the Trunk & C. F. A. lines. [Witness excused.]

A statement furnished by Mr. Pearson of water freight rates on fuel from the Jersey shore to points between Coscob, Connecticut, and

Boston; from the Virginia Capes to the same points, and from Baltimore to the same points, for the three periods, 1914-1915, 1916, and 1917 to the present time, was received in evidence and marked Defendants' Exhibit No. 102.

973 A statement furnished by Mr. Palmer, Comptroller of the New Haven, and signed by him, showing the cost of the New York Connecting Railway, the road and equipment account for that company as of November 30, 1920, cost of the Cedar Hill yard and certain appurtenances, cost of the Providence Northrup Avenue yard, amount expended on additions and betterments chargeable to capital account of the New York, New Haven & Hartford Railroad Company, being the amount charged by the United States Railroad Administration against the New Haven as shown by the latter's books as of November 30, 1920, was received in evidence and marked Defendants' Exhibit No. 103.

A statement of the mileage of the lines, New Haven to Springfield and west thereof, as compared with the total mileage of the Central New England and New Haven Railroads, as shown by the official guide, was received in evidence, subject to check by the New Haven, and marked Defendants' Exhibit No. 104.

A statement of the detail of fixed charges of the New Haven, furnished by Mr. Choate, was received in evidence and marked Defendants' Exhibit 105.

FRANK H. ALFRED, called as a witness by the defendants, testified:

974 Direct examination:

That he is president and general manager of the Pere Marquette Railway Company. His railroad experience began with the Norfolk & Western Railroad as engineer in 1889–1894, 5 years; then 2 years with the Hocking Valley as assistant to the chief engineer, 1894–1896; then about 4 years with the old C. A. & C., now a division of the Pennsylvania, as engineer in charge of maintenance of way, from 1896 to 1900. He began work for the Pere Marquette Railroad in March, 1901, as division engineer, and shortly after that time, in May, 1902, became chief engineer of that railroad, a position which he held until the winter of 1905, when he went to Canada to engage in railroad construction work in the Northwest. He was engaged in that work for about 3 years, and then in 1909 went to the Cincinnati, Hamilton & Dayton Railroad as general superintendent and assistant to the president. He held that position until 1912, when he again entered the service of the Pere Marquette Railroad, this time as assistant general manager. In December, 1912, he was made general manager of the Pere Marquette. In April, 1917, he became president of the Pere Marquette Railway, and has since held that position, except for a time during the recent period of Federal control of the railroads, during which time he was

975 Federal Manager of a number of Michigan lines: The Pere Marquette from June 10, 1918, to March 1, 1920; the Grand Trunk Western Lines from July 3, 1918, to May 1, 1919; the

Detroit & Toledo Shore Line from July 3, 1918, to May 1, 1919; the Lake Michigan car ferry, July 26, 1918, to May 1, 1919; the Detroit, Bay City & Western from August 15, 1918, to March 1, 1920; the Detroit & Mackinac Railway from August 15, 1918, to June 1, 1919; the Port Huron & Detroit from August 15, 1918, to March 1, 1920; the Port Huron & Southern from August 15, 1918, to March 1, 1920; the Ann Arbor Railroad from August 15, 1918, to May 1, 1919.

A map of the Pere Marquette Railway was received in evidence and marked Defendants' Exhibit 106, Witness Alfred.

The Pere Marquette Railway system comprises about 2,240 miles, including the leased property. The ownership is about 2,045 miles, of which 1,810 miles are within the State of Michigan, the southern peninsula. The Pere Marquette also operates boat lines, as shown in dotted black on the map, the distances of which are not included in the statement the witness has just made.

Asked to proceed in his own way with his statement, the witness said:

"It is my understanding that what it is proposed to do in this case, so far as the Michigan railroads are concerned, is to make an arbitrary (that is, a fixed or pre-determined) deduction from
976 the divisions accruing to the Michigan railroads on account of business interchanged with the New England lines, and turn the amount of this arbitrary deduction over to the New England lines; and I understand that one of the grounds on which the arbitrary deduction is sought to be justified is that the present divisions were established many years ago and do not reflect certain comparatively recent changes in the expense of handling traffic in New England and in Official Classification territory outside of New England, which changes are said to have operated adversely to the New England lines. These changes are: first, the placing of car rental on a per diem instead of a mileage basis, and subsequent increases in the per diem rate. Second, the standardization of railroad wages. Third, the increased cost of procuring the transportation of fuel, materials and supplies from points of production to the junction of the carrier that uses the fuel and materials.

"Now the general situation is that so far as the Michigan lines are concerned these same changes have affected them adversely as well as the New England lines, and therefore it would be most unfair to take away any of the revenues of the Michigan lines and give them to the New England lines because of these changes.

"I shall first consider the subject of the change in the basis
977 of car rental.

"The principal Michigan railroads are debtor roads so far as car rental is concerned. This is due to a number of causes, prominent among which is the fact that Michigan railroads are not able to secure a mileage per car per day anywhere equalling the roads of the country. The average daily movement of cars on the Pere Marquette Railway during the year 1920 was 16.32 miles per day,

while the average for the entire country was very much greater. I cannot give the exact figure, but it was understood that the average throughout the country up until September of his year was somewhere about 25½ to 26 miles, since which time the movement has been increased until it is now claimed that they have reached or did reach approximately 30 miles.

"The New England lines, according to Prof. Cunningham's testimony, secured a mileage in 1919 of 16.1 miles. I do not know what their figure is for 1920. Ours for 1920 was 16.32. That is the year just closed. I only received the figures yesterday for the last month.

"This slower car movement necessitates the presence on the Michigan railroads of a comparatively larger number of cars to carry on the transportation that is necessary to move the traffic, and this slower movement is due to the numerous terminals in Michigan, the diffusion of traffic and the pick-up and distributing character
978 of railroad operations in the state of Michigan.

"The state of Michigan is not a large producer of coal, and all coal produced in Michigan is used largely for domestic and commercial purposes and not as railroad fuel. This means the presence on the Michigan railroads of a large number of open top cars that bring in coal from the Ohio district and the West Virginia fields through the Toledo gateway, and the Indiana and Illinois fields through the western gateway, and on these cars a large amount of per diem unavoidably accrues, due to the fact that it is the function of the Michigan railroads to distribute this coal in comparatively small lots all over the state. The Michigan railroads cannot be expected to own sufficient coal cars to handle this business, for the reason that no particular road has any assurance that in any particular year it will get for itself any determined amount of this coal traffic, a considerable portion of which is highly competitive as between railroads.

"The railroads serving the coal producing localities refuse to permit the shipment of coal in foreign line cars when they have cars of their own available for handling the traffic. The outbound movement of commodities from Michigan consists, in substantial part, of agricultural products that move only during the fall months, and on which our connections enjoy comparatively long hauls.
979 A considerable amount of this traffic is carried in foreign line cars and on these cars it is necessary to pay a large amount of per diem, cars moving empty to stations located all over the state and being picked up in small lots from a very large part of the producing localities.

"Illustrating how serious a burden per diem charges are on the Michigan railroads, I read from a statement 'The Cost of the Pere Marquette on Account of the Per Diems,' for a number of years back."

An exhibit was received in evidence at this point and marked Defendants' Exhibit No. 107, Witness Alfred.

Asked whether he desired to read some figures from this exhibit, the witness said:

"This is a statement on account of hire of freight cars, debit balances for various Michigan railroads for the fiscal years 1909 to 1917 inclusive, and the year 1920, the record not being shown for the Federal control period, 1918 and 1919. Per diem was not collected. Records were kept to some extent, but per diem was not assessed. This statement shows the debit balances of five railroads, the Ann Arbor; Detroit, Bay City & Western; Grand Rapids & Indiana; Pere Marquette; and the Wabash. I would refer particularly to the Pere Marquette. The statement shows that during the 10 years,
980 1909 to 1920 inclusive, not counting the years 1918 and 1919, the debit balance against the Pere Marquette is $6,984,441.64, being approximately $700,000 per year. It will be noted in the statement that the debit balance has grown larger almost each year. That is due in a measure to the increase in the per diem rate, due in very large measure to that.

"It is hardly necessary to say that if we could settle with our connections for rentals on the mileage basis formerly in effect, we should save a large amount of money annually. This saving would amount to over 50 per cent. of the present expense to this company. It has for years been my idea that eventually a car rental would be based upon a combination of per diem and mileage, the per diem being a sufficient amount to insure the prompt handling of the car, and the balance of the rental to be paid on the basis of the use made of the car. For example, as compared with the present rate of $1 per day for the use of a car, a more equitable charge would be 40 cents per diem, plus 2 cents per mile used. 2 cents is the rate now in effect on privately owned cars. The average mileage secured by cars in the United States today is approximately 30 miles. Therefore, 30 miles at 2 cents, plus 40 cents per diem, equals $1 per day, which is the present charge per day. Under the present plan all roads
981 pay the same, regardless of the use made of the car. Intermediate carriers that do not originate or terminate the business can easily secure 50 miles per day in movement, while roads that perform an originating and delivery service secure a much lower movement and, in addition, are obliged to bear the per diem at the point of origin and destination. In my judgment the Pere Marquette owns its fair share of the railroad equipment of the country and is being unjustly treated in the matter of per diem, for the reason that it is not able to get to exceed 20 miles per car per day, and for the year just closed, something over 16 miles, while the average for all the railroads of the country is approaching 30 miles per car per day. The Pere Marquette voted against the recent increase in the per diem rate. I understand that most of the New England roads voted for it.

"I shall next take up the standardization of wages. Neither is it true that the recent standardization of railroad wages has worked to the peculiar disadvantage of the New England lines, as opposed to the railroads of the rest of the country, and particularly the Michigan roads. On the Pere Marquette, for instance, we had two scales

of wages in train and engine service; a main line scale and a branch line scale. The branch line scale was substantially lower and applied to nearly one-half of the mileage of the system. A number
982 of smaller lines in Michigan, notably the Detroit & Mackinaw Railroad, had in effect scales of wages very much less than were in effect on the main lines of some of the larger railroads of the country. The standardization of wages, therefore, has caused a very substantial increase in the expense of the Michigan lines.

"When the Pere Marquette Railroad was taken over by the Administration January 1, 1918, it had with its employees six agreements. I will give them in detail: One with the Brotherhood of Locomotive Engineers; one with the B. of L. F. and E., one with the O. R. S. E.; one with the B. R. T.; one with the Telegraphers; and one with the Switchmen's Union of North America. These six agreements were with the six classes of employees named. When our road was returned to us on February 29th last—and I may say that the Pere Marquette is one of the few roads that did not accept the Government's protectorate during the six months of control period—we got back with our road 16 agreements, covering every class of employee on the system, and the agreements that we did have were standardized, so that in the train and engine service a man working on a branch line was paid the same rate of pay that a man received for working on the main congested part of a busy single track main line. I mention this particularly to show how the rail-
983 roads—not the Michigan railroads particularly, but all the railroads—have been made to suffer and their cost of operation has been increased by reason of these agreements, the standardization of wages and unbearable working conditions. I would not be surprised if those conditions have as much to do with the troubles in New England as any other single thing. I am sure it has with the roads in the territory with which I am familiar. When I speak of the difficulties in New England, I want to be understood as not criticising in any way what I understand is really the financial difficulty. I know nothing about the operations of New England lines. I assume that they are as well operated as roads are anywhere else in the country. So far as I know, the New England operating men, I think, are able to take care of themselves, and I have no criticism whatever to offer with reference to their operating results that they are getting on their properties; but I do know, as I have said, that all railroads are suffering in greater or lesser degree from the application of the onerous conditions that have been thrust upon us through these agreements and working conditions.

"I shall next discuss the increase of transportation costs on railroad fuel, materials, and supplies. Nor is it true that the New England lines are unique in being situated at some distance from the points where railroad fuel and other materials and supplies are
984 produced, and therefore subject to a heavy transportation burden in getting this fuel and these supplies to their lines. Our fuel coal last year came largely from the eastern Ohio fields and from Illinois and Indiana, the larger portion of it coming to us through the Toledo gateway. That situation is true of other Michigan roads.

The freight rate paid to foreign lines for fuel coal coming through the Toledo gateway is approximately $1.55 per ton and the rate paid on coal coming from the Illinois and Indiana fields is approximately $1.40 per ton. The Pere Marquette Railway uses approximately 1,000,000 tons of fuel coal annually; and, at the new rates, the cost of freight will be approximately $1,500,000 annually.

"The average cost per ton for the 4 months, September to December, 1920, inclusive, was $5.05 in the United States, and $6.80 for the coal used in Canada. This was the cost at the junction point where received. It should be borne in mind that on all of this fuel coal, each increase in the general level of freight rate has imposed on the Michigan carriers an additional burden."

The length of the haul of this fuel coal varies. The distance from Toledo to Ludington is 272 miles. Witness' railroad hauls a large amount of coal to Ludington to take care of their Ludington
985 terminals, and their lake boats, which are coaled at Ludington. The haul from Toledo to Grand Rapids would be 137 miles. The haul from Toledo to Saginaw would be 177 miles. Witness would say that an average haul on their fuel coal from Toledo to the points where used would be approximately 175 miles—possibly a little more than that.

There are a great many coaling stations on the Pere Marquette. Its heavy coaling stations are Grand Rapids, Saginaw, and Ludington, for the boats. There are other coaling stations, such as Detroit, Plymouth, Benton Harbor, Baldwin, and Edmore; then, a group of still less importance, such as Waverly, Muskegon, Traverse City, Port Huron, Lansing, Grand Ledge, Ionia, and so forth.

Asked as to how the situation of his railroad in regard to getting coal to his line, and then from the junction where received to its coal dock, compares with lines south of it in Ohio and Indiana, the witness said:

"I should say the haul from the junction joint where we receive our coal from our southern connections to our coal docks would be as long as a haul of those roads to the South from the mines to the points where the coal is used, meaning by that that the amount that is paid in freight is an excess freight to us over the cost of
986 fuel to the southern conections that have mines located on their own lines. The cost of handling coal on our line from the junction points to the docks where used, on the basis of 9 mills per ton mile, for 6 months of last year, being alternate months, January to November, will approximate $600,000, equal to $1.30 per ton."

A statement was received in evidence at this point and marked Defendants' Exhibit No. 108, Witness Alfred.

Witness means that the amount named is what it costs to take the coal from the junction points to the Pere Marquette coaling docks, based on the cost of 9 mills per ton mile for handling over its own line. He considers that the distance from their junction points, where the coal is received, to the coal docks, where they use it, is as long a haul as their southern connections have in getting their coal

from the mines to the points where they use it, so that the freight paid out to foreign lines for the coal is an excess to them over what their southern connections in C. F. A. territory pay, that have coal mines located on their lines, and most of them have.

Asked whether he wished to make any comment on Exhibit 108, the witness said:

"The only comment I wish to make is that it does not quite check with the statement I just made, that our average haul was 175
987 miles. This shows that the haul on this particular coal was 144.54 miles. There is a reason for that. Our average haul is about 175 miles, as I have stated. We have had great difficulty in getting coal during the year just closed, and we bought a good deal of coal from territories that we had not been ordinarily buying from, and we bought an excessive amount of coal from the Indiana and Illinois field that was used in the west side of the State, which ordinarily comes from the eastern Ohio fields. That is what brought this mileage down, making our haul, according to this statement, about 145 miles on our own rails."

This exhibit shows that the average total cost per ton at the coal dock of Pere Marquette coal for last year was $6.19 per ton, based on the price at the time the coal was purchased. On the price of coal at prevailing cost it would be about $5.99.

Witness thinks that a great many roads south of his road have mines located near the middle of their lines, so that they have a comparatively short haul to get coal from the point of production to any given coal dock. For example, the Hocking Valley coal field is rather centrally located, in the Nelsonville field, about 180 miles south of Toledo. The T. & O. C. coal fields are rather central on the lines, being around Corning. The Wheeling and Lake Erie
988 coal fields are around Adena, which is centrally located. Roads like the Pennsylvania and the B. & O. and the Big Four have coal fields at a number of places on their lines.

There is produced in Michigan somewhere around 1,000,000 or 1,100,000 tons of coal annually. The Pere Marquette does not use the Michigan coal. It is not as hard a coal and not as good a steam coal for locomotive purposes. However, the Michigan coal is in great demand commercially, for domestic purposes, and the entire output is sold at prices beyond which the Pere Marquette could afford to pay for coal.

The witness continued:

"Another expense in connection with operating railroads in Michigan, is in our cross-ties. We use approximately 850,000 ties annually on the Pere Marquette, and of these we purchase about three-quarters from the South. Last year we had a contract with the Indiana Tie Company for a million ties. These ties come to us from Joppa, Ill., and Evansville, Ind. They are rafted down the Ohio River and taken out there and treated before they are shipped to us. The price of these ties to us, delivered at Michigan City and La Crosse is from $1.64 to $1.84 per tie at the mill, and, in addition to that, we pay the

freight rate of approximately 20 cents per tie, making the price from $1.84 to $2.04 per tie at the delivering point on our rails. We buy some ties in Michigan, but are entirely unable to fill any sub-
989 stantial part of our requirements from that source. In former years we had little or no trouble in securing our ties locally in Michigan. This change in conditions has operated to inflict a heavy burden on us. This same situation is true with reference to other materials used in our maintenance work. Practically all of our bridge timber comes from the Pacific Coast. Our switch ties come from the South. Our car timbers come from the extreme South.

"Another ground on which the arbitrary changes in divisions proposed in this case are sought to be justified is that the present divisions do not properly reflect comparative operating costs inside and outside New England at the present time; namely, that it costs more per ton mile to transport a ton of interchanged freight inside New England than it does outside of New England, and that this condition is not properly reflected in the present divisions.

"The comparative operating handicaps that are specifically described as increasing the transportation costs in New England are: Low density of traffic; the absence of through tonnage; the absence of heavy loading commodities; the unbalanced character of the tonnage; adverse weather conditions; short hauls; remoteness from the source of fuel and other materials and supplies; the diffusion
990 of traffic; the terminal nature and characteristics of the service performed by New England lines; and high taxation in the State of Maine.

"In all the comparisons that have been shown to me, made by the complainants in this case, of conditions inside and outside of New England, the complaining New England roads are treated as a group, and comparison is made with the combined figures for all of the roads in Official Classification territory outside New England, also treated as a single group: Such a comparison as this throws no light on the comparative situation as between Michigan and New England. The fact is that so far as operating conditions are concerned, Michigan and New England are very similar, and it is entirely unfair to judge operating conditions in Michigan and the operating results which it is possible to obtain in that state according to aggregate figures covering all lines in Official Classification territory outside of New England. I mean by that that our situation in Michigan is more nearly like New England than it is the balance of the C. F. A. territory with which we are grouped.

"One of the principal operating handicaps of which the New England lines complain is low density of traffic. On page 452 of the decision of the Commission in the proposed increases in New
991 England, 49 I. C. C., 421, the Commission took occasion to compare the freight traffic density of the principal railroads in New England with the freight traffic density of typical Michigan railroads. These figures indicate that the freight traffic density in New England is slightly higher than that in the State of Michigan.

"I desire at this time to submit a statement prepared under my direction."

The statement last referred to was received in evidence and marked Defendants' Exhibit No. 109, Witness Alfred.

Exhibit No. 109 covers the freight traffic density only. It is a statement showing density of freight traffic as to the number of revenue tons carried one mile per mile of road by Michigan railroads, as indicated.

The total freight traffic density of the Michigan lines is 1,189,506, and on the New England lines 1,309,138. The Michigan figures were made from an actual study of the waybills of May, 1920. The annual result was obtained by multiplying the monthly result by 12.

Witness thinks that so far as the Michigan lines are concerned, it is more accurate than the traffic density figures taken from the annual reports of the Michigan carriers, and averaged. Probably more care was used than ordinarily would be used. The Michigan Central annual report as to tons carried one mile in Michigan
992 also includes tons carried one mile in the Dominion of Canada. That would be true of other roads that run out beyond, as the Detroit & Toledo Shore Line, for example.

The figures for the New England lines were taken from the annual reports of 1919.

The density of passenger traffic of New England vastly outmatches that of Michigan.

Witness offers a statemen ton that, which was received in evidence and marked Defendants' Exhibit No. 110, Witness Alfred.

The witness continued:

"This statement shows the density in Michigan of 154,590. That is passengers one mile per mile of road. For New England it shows 474,194, something over three times the density in New England that we have in Michigan. This was taken from the annual reports of 1919. I would be justified in going into the comparisons of traffic density of New England and Michigan to a larger extent if that subject had not already received full consideration of the Interstate Commerce Commission, which, in the case of Proposed Increases in New England, 49 I. C. C., 421, said:

" 'New England is similar to the lower peninsula of Michigan in several respects. Both are partially surrounded by water.
993 From the northern part of both territories lumber is shipped in considerable quantities. Both territories are traversed by important railroads whose lines run east and west. Climatic conditions are much the same. In the southern part of both territories high grade manufactures are produced, necessitating the movement of large quantities of raw materials inbound. The railroads in both territories must get their fuel supply from a distance. Neither territory produces a substantial amount of low grade tonnage, such as coal and ore. Paper is produced in large quantities in both territories. The analogy could be carried still further, but it must be apparent from what has already been said that the two territories

are generally so similar that they should have approximately the same class freight rates.'

"With respect to the traffic density, it is also noteworthy that it is much less in Michigan than in the rest of C. F. A. territory. The facts concerning this phase of the situation have been very compactly summarized by the Commission in the C. F. A. Class Scale case, 45 I. C. C., 254, where the Commission said:

"'From a traffic standpoint, Michigan is peculiarly situated. The tonnage handled by the carriers, in large measure, has its origin or destination in that state, and there is not as much over-
994 head or through traffic as we find passing through Ohio, Indiana and Illinois, en route from Trunk Line territory to points west of the Mississippi River, or vice versa. Compared with the other states in C. F. A. territory, Michigan is sparsely populated. The extensive timber lands which formerly supported the Michigan carriers have, in large measure, been cut over. Agriculture is not yet fully developed, and there is much unoccupied farm land. Michigan stands far below the other states in the production of brick, pig iron, iron and steel articles, coal, stone, petroleum, and other commodities which constitute the principal sources of revenue for railroads generally. Lake carriers deprive the Michigan carriers of a large tonnage in commodities which are handled by rail in other states. The result is that the density of traffic in Michigan is considerably less than elsewhere in C. F. A. territory.'

"The Commission, in both of those decisions, said that we should have the same class freight rates as New England; that we are entitled to the same, and that our conditions are different in Michigan from the balance of C. F. A. territory.

"It is true, as the Commission says, that the principal causes of the low traffic density in Michigan are the comparatively small amount of through tonnage and the comparative absence of traffic in heavy loading commodities.

"The next handicap mentioned by the New England lines
995 is the unbalanced character of their freight tonnage. We have a comparatively large inbound movement of bituminous coal, and the amount of tonnage that we can secure to be loaded into those cars outbound from Michigan is comparatively small. This is also true of the cars carrying about 1,000,000 tons of company fuel. We have a very substantial outbound movement of farm products, including fruits. The cars which carry these products from the State of Michigan have, to a large extent, to be hauled into the state empty. This is universally true as to the cars handling fruit.

"Complaint is also made by the New England lines as to the adverse weather conditions with which their operation is confronted in New England. The Michigan carriers also suffer much more than carriers in Official Classification territory generally from extreme weather conditions in the winter. It is necessary to run many trains for snow plow service. A large part of the time of section men in cold weather has to be devoted to keeping tracks clear of snow. The prevalence of severe weather in Michigan results in heavy per diem expense to the Michigan carriers, due to lessened

car mileage per day and delays resulting from adverse operating conditions. More serious still, the tonnage that an engine can handle is much lessened by severe weather. The rating of
996 freight locomotives on the Pere Marquette Railway during the winter season will average about 75 per cent. of their rating during the favorable operating weather, and in severe weather this rating is reduced more than that. The Michigan roads that operate car ferries across Lake Michigan and the Detroit and St. Clair rivers have a good deal of trouble with the car ferry operations in the winter. In severe weather the condition of the ice and the winds on Lake Michigan is frequently such as to practically cut out the Ann Arbor and Pere Marquette railroads, so far as through traffic to the Northwest is concerned, sometimes for as much as a day, or maybe even longer. The greatest trouble in our car ferry operations is not with the solid ice, but with the drifting ice that is driven by the wind. The ice is pushed into the shore, making solid fields of three or four miles from the shore, through which the ferries have to work their way very slowly, at great expense and risk. Michigan roads meet the all-rail rates to Milwaukee via Chicago, thus bearing all the expense of the ferry movement. There are many roads in Official Classification territory that do not have these difficulties due to the extreme weather conditions in the winter. With the exception of the roads located in the immediate vicinity of the south shore of Lake Erie, the Central Freight Associa-
997 tion roads do not have much trouble with snow. Many of them own no special snow plow equipment.

"I have already considered in another connection, the handicap common to the New England and Michigan lines, touching their remoteness from the source of supply of fuel and other materials. The New England lines complain that their traffic is diffused, and therefore expensive to handle, and that their operation has the characteristics of terminal operation and is therefore comparatively expensive to conduct. It must be remembered that on by far the greater part of the business in which the New England lines and the Michigan lines participate, one terminal service is rendered by the New England lines and the other terminal service by the Michigan lines. We have the same kind of difficulties as to the diffusion of traffic and as to the terminal characteristics of operation that they have. On the Pere Marquette Railway, for instance, only about 10 per cent of our traffic is through or overhead traffic. I understand from the testimony given that the New Haven claims that about 7 per cent of its traffic is through. So far as the Pere Marquette is concerned, about 34 per cent of our business originates and terminates on our own rails, thus requiring an originating and delivering terminal service, to say nothing of the intermediate terminals through which the shipments may pass. This requires a switching service both at the point of origin and the point of destina-
998 tion, and at each point the shipper is entitled to 48 hours of free time on his car. About the same amount of our business, namely 34 to 35 per cent, originates on our rails, destined to points

beyond, and less than 30 per cent of our business comes to our rails for delivery in Michigan.

"There are 34 train and engine terminals on the Pere Marquette. I mean by that break-up and distributing yards and points. Our business is characteristically a pick-up and distributing business. We act in the capacity of gatherers and distributors of tonnage. We have a large amount of milling in transit business. In many cases the transit point is situated well off the direct through route. For instance, the Huron Milling Company, an institution of very substantial size, is located in the so-called "thumb" of Michigan, at Harbor Beach, near the end of our Harbor Beach branch. They manufacture starch and macaroni, and buy large quantities of grain in the West for that purpose. A car of grain comes on to our lines at Chicago, destined to this firm. It moves first to New Buffalo, a point 60 miles out from Chicago, and here, near the southern border of Michigan, we have a large terminal. There it is put into another train, and taken to Grand Rapids, a distance of 112 miles. There it is put into another train and taken to Saginaw, a distance of 134 miles. There it is placed in another train and moved 67
999 miles to Bad Axe — it is put into another train and moved 20 miles, to Palms, a junction with the Harbor Beach branch. At Palms it is put into another train and moved 16 miles to destination. If this is a car of grain that enjoys the transit privilege, the outbound product of this grain is taken from Harbor Beach to Palms, and there put in another train for Port Huron, ferried across the river to Sarnia, and there put in another train which takes it to St. Thomas, and from there put into another train that takes it to Suspension Bridge. This car has thus required 11 terminal operations besides the ferry movement across the river at Port Huron, and has moved 143 miles out of direct line.

"Take a car loaded with silk, received from the East and going to the very extensive silk mills at Belding, Mich. The car would be received at Buffalo and moved in a train to St. Thomas. There it would be placed in another train and moved to Windsor. There it would be ferried across the Detroit river, where it would be placed in another train, what we call our puller service, and taken to Plymouth. There it would be placed in another train and moved to Elmdale. From there it would be placed in still another train, to be moved to Belding.

"These examples are merely illustrative. The point that I wish to make is that the operation in Michigan has to be conducted
1000 in large measure by local freight trains, and not by through trains; and that this local freight operation is more expensive than the through operation. The pick-up character of our business is very much accentuated by the large amount of milling in transit that is done in Michigan on beans, grain, hay, and lumber, the movement of these commodities to the transit point involving a very large amount of short haul local train service."

Switching mileage on the Pere Marquette is very heavy. It is practically 100 per cent of its road haul mileage. The yard and

terminal expense on the Pere Marquette is quite a large proportion of its total expense.

The witness continued:

"In the month of September our freight locomotive miles were 373,998; our switch locomotive miles were 344,080, our switch locomotive miles being 48 per cent of the combined road and switch miles for that month.

"For the same month our expense in train and engine service, excluding that part of the station employes that would be charged to that service, was $839,307.96. Our yard service, including the station service, was $754,001.95. That is a little more than should be included for the yard service. There should be a deduction made for the wages of station employes at other points, doing other work,
which I have not taken out. But this would show that our
1001 yard service, switching service, will exceed by considerable one-
third of our total expense. It would exceed by considerable one-third, I would not want to say that it would be 48/100, as I have just figured out the mileage, as I do not think it would; but it would exceed it by considerable.

"Now, speaking of our expense in connection with our switching and yard service, I think it might be well for me to mention there our situation with reference to our l. c. l. We do a large amount of less than carload business on our railroad. It just occurs to me that I have heard our auditor say that we make as many waybills on our railroad as the Chicago & Northwestern Railroad does or did at one time when a check was made.

"I have here a pamphlet, that I got out for another purpose, that I would like to read from. These are some statistics that were prepared 3 years ago, in connection with our costs of handling less than carload business, and these were prepared about the time that the Michigan Zone Rate case was up.

"These figures show that of the total tonnage handled on the Pere Marquette Road, about 8½ per cent is merchandise; that to
handle that tonnage there we used 29.84 per cent of all the
1002 cars on the Pere Marquette road. In other words, it takes practically 30 per cent of all the cars on the Pere Marquette to take care of the less than carload business; and the revenues from that business amount to 21.63 per cent. Therefore, to handle less than 9 per cent in tonnage it takes 30 per cent of the cars, and you derive 21.63 per cent of your revenues.

"Of course, that is a very expensive business, and there is no doubt but that our road suffers more on account of the handling of this less than carload business and that there is less profit in it than in any other business we handle on our property."

Witness will be glad to forego the less than carload business to the motor trucks. They have been to see him, and he has always joined most heartily in speeding on the motor truck. He would be very glad if the motor truck could help out in the congested districts, where they could make direct delivery.

The witness continued:

"I want to add to this statement, if I may, something that had not occurred to me until just now. That is, looking at this from the standpoint of ton miles—which is a very important thing—that to handle the actual tonnage of 8.34 per cent. of our total the ton miles of this merchandise are 19 per cent. of the total, leaving 81
1003 per cent. of the ton miles for the balance of our business.

"So that, to complete the statement, I would like to say that to handel 8.34 per cent. of tons it requires the 29.84 per cent. of cars and on which the mileage is, in ton miles, 19 per cent. of our total mileage, and for which the revenue derived is 21.6 per cent. of our total revenues from freight.

"Commenting on the operating handicaps sustained by the Michigan lines, the Interstate Commerce Commission said in the C. F. A. class scale case, 45 I. C. C. 254:

" 'The greater cost of obtaining coal owing to the long hauls from the mines, the greater severity of the winter weather, lack of train-load commodities, and various other conditions work for higher operating costs than obtain in C. F. A. territory generally.'

"So that we have our handicaps in Michigan that appear to be, from the investigations of the Commission, quite parallel to those in New England.

"The handicap under which the Michigan lines have labored have obviously made necessary a higher level of rates in Michigan than in many other parts of Official Classification territory. Both the Interstate Commerce Commission and the Michigan Commission have recognized this situation, and it is reflected in the rates that have been put in under their authority. The Michigan lines have
1004 not attempted to use their necessities as an argument for reducing divisions of their connections, but have carried upon traffic moving into and out of Michigan a higher scale of rates than obtains upon traffic in some other parts of the country, and have obtained their additional revenue out of the excess revenue that the higher rates produce.

"The shippers and receivers of freight in the State of Michigan have, for the most part, realized the peculiar difficulties under which the Michigan carriers have labored, and the higher level of rates in Michigan than in some adjacent territory has been for the most part willingly acceded to with the idea that this higher level of rates is necessary in order that the transportation system of Michigan may be built up and adequate transportation service rendered the people of the state. It is obsolutely sure, however, that those who are paying these higher rates in Michigan will not continue to do so willingly, if they feel that a portion of the revenue that they are contributing to the Michigan carriers is to be taken away from the Michigan carriers and turned over to the carriers of any other section of the country.

"As to the Michigan Zone Rate case, I do not want to go into that, because I am not a traffic man, and I do not want to go into the traffic in any way or into operations; but I do want to state that I

was particularly interested in that at the time, and was a wit-
1005 ness at the time of that case, and did everything I could to promote it; and we were successful in securing additional rates in Michigan—a different amount in each of the zones—that were set up—over the actual tariff rates; but no part of this added money that was secured was taken in the divisons or put in the divisions with our connections to the south of us in Centarl Freight Association territory. The Michigan lines secured the full benefit of that. We plussed the rate in Michigan, and that was a very great help to all the Michigan roads. It amounts to a large amount of money; I could not say just how much to the Pere Marquette, but I should say considerably over half a million dollars annually. It is probably close to a million dollars. The last figures I saw were somewhere over three-quarters of a million dollars. Things have changed so that it is pretty hard to keep track.

"Now, I do not know just how the Anderson scale stands—whether it is in full force and effect in the New England States or not; but I understand that that is similar to and that it practically followed what we did in Michigan, but it has occurred to me that maybe the difficulties in New England were largely local; that it was a matter between the railroads of New England and the public of New Eng-
land, and I feel very strongly that they should be as able to
1006 work out their situation in New England as we have been in working out our situation in Michigan, and I am sure that our shippers in Michigan would not stand for these rates they are now paying there if there were to be any change in the divisions by which that money which they pay in to the railroads there—a portion of it—would go to carriers in other territories."

The divisions received by the Pere Marquette have not been revised in recent years. They are pretty old. Its divisions with New England are quite old. Witness does not know just how many years. The witness continued:

"The operation of typical Michigan carriers in the past and in the present has not been and is not profitable.

"I desire, before concluding my testimony, to call attention to the bonded indebtedness and fixed charges of the Pere Marquette Railway. The present company bought at foreclosure sale the property of the old company and commenced doing business as the Pere Marquette Railway Company as of April 1, 1917.

"The bonded debt, outstanding notes, equipment obligations and receivers' certificates at the end of the receivership amounted to $87,000,000 plus. The bonded debt of the Pere Marquette Railway Company amounts today to $36,325,000.

"The fixed charges of the old company, including the in-
1007 terest on the receivers' certificates, amounted to $3,877,540. The fixed charges of the new company amount to $1,687,760.

"This means that the obligations of the company were shrunk over $50,000,000, and that bondholders, in many cases, accepted common stock, upon which they paid an assessment, and upon which

no dividend has yet been paid. No dividends on the common stock or preferred stock were paid for years prior to April 1, 1917, and no dividends have been paid by the new company on the common or the preferred stock since the reorganization.

"That is not true of some of the New England lines, and I consider that the interest of the security holders of the Pere Marquette Railway should be protected before making contribution, either through a change in the division of the rates or otherwise, to the New England or any other group of roads to preserve their solvency."

Asked whether he knew of any fact, circumstance or condition which has served to increase disproportionately, as compared with lines in Ohio and Indiana, any of the operating expenses of the lines in Michigan in recent years, the witness said:

"Well, the things I have mentioned. For instance, the excess cost of fuel in Michigan as against lines in Central Freight As-
1008 sociation territory to the south of us. That is one of our heaviest expenses, which they do not share in. As I testified, the freight we pay out on coal up to the junction is about a million and a half dollars. A million and a half dollars on our operation is quite a heavy per cent., and that is over and above the expense that the lines to the south of us have in their operation."

The witness' line always had the expense described over and above the lines in Ohio and Indiana. He would not say there has been no circumstance or condition in recent years which has served to increase more in Michigan their expenses than the same expenses have been increased in Ohio and Indiana. The expenses in Michigan have been increased in a greater proportion than those of the roads to the south, for several reasons. The Pere Marquette does not own equipment to take care of its operations in Michigan. It is a borrowing road. Most Michigan roads are. That being true, if they do not own enough cars to take care of their balance, and are obliged to use the cars of their connections to the south, with the rate on per diem as it has gone up from year to year, that does change the proportion of their disability as compared with the roads which are credit and coal roads. Roads like the Hocking Valley, for example, who owns upwards of 40 cars per mile of road. That is an
1009 unusual number of cars for a road to own, but they have to do it to protect the business which originates on their line.

Roads like the Pere Marquette cannot and do not own enough coal cars to equalize on the coal business that they handle in Michigan, so that, as the price goes uup on those cars that the road does not equalize on, of course, its expense goes up in proportion. The raw material which is used in the furniture industry has to come from outside. Quite some of it was once obtained in Michigan. Witness does not think this is particularly a disadvantage to have it come from outside.

Pere Marquette ties are all shipped in from the south. These ties used to cost them, for freight to their connections, about 9 cents a

tie, and then up to 11 cents. Now it is 20 cents a tie. Of course, that changes the relationship of the maintenance of the property as compared with its neighbors to the south.

The standardization of wages injured lines like the Pere Marquette, the Detroit & Mackinaw, and the Ann Arbor, more than it did the lines to the south. On the large lines the wages were standardized before. That is, many of the roads paid one scale of wage. The Pere Marquette always had the advantage, since the wage scale went in, in paying on its side lines a lower rate—approximately 10 per cent, or maybe a little more than that, than the standard rate of
1010 pay. The smaller lines in Michigan, like the Detroit & Mackinaw, and the Manistee & Northeastern, paid a very much less scale. They were able to do this to some extent, at least, on account of the comparatively low cost of living in that territory as compared with the cost of living in the large centers of the country.

Cross-examination:

Witness has felt that in the case of a terminal road such as his, in the territory where it is, the per diem charge as now established was rather unfair and a hardship. He would say that the same applied to the situation of the New England roads. He has studied the problem from every side to see how he could meet it, and has come to the conclusion that it cannot be escaped. Simply buying equipment would not at all relieve them from the burden when there is this tide of coal cars coming in, which have to go out again. If they increase their own equipment it will result in their having their own cars standing idle on their line, while foreign cars are coming in and being charged up to them. That is inherent in the situation of a terminal line.

Saying that he would like to say something on that, the witness continued:

"We have had that up constantly on the Perre Marquette
1011 road for years. I have studied this with Mr. Hale, when he was active in the American Railroad Association—Mr. Arthur Hale. We have been trying to evolve something that would work out a situation like ours.

"It is a fact that on our railroad, where we own upwards of 4,000 coal cars, we have all the open-top cars that are needed to take care of our company fuel, to take care of all the needs of Michigan within the State as to the business that we originate; but we do not have enough cars to equalize with the coal that comes in from the outside for distribution.

"We bought a thousand cars under the equipment trust agreement recently. We took a thousand big hopper cars. They cost us a little over two and a half million dollars. Already I have had notice served on me by our connections that they will not receive those cars for our company fuel. Why? Because they have their own cars available.

"Now, suppose that, instead of owning 4,000 coal cars—when we

have had on our road constantly until recently an average of 6,000 cars—I were to buy 2,000 more coal cars. What use in the world would they be to the Pere Marquette Railroad, except when there was a tremendous demand for coal in the fall and winter.

"I have been criticized many times because I have not
1012 enough coal cars to equalize; and we have no assurance that the coal is going to move our way. It is highly competitive coming into Michigan. We may get it this year, and next year some one else gets it."

The burden of per diem in New England, because of the unduly large volume of coal moving into New England, is greater than in the case of coal moving into Michigan.

During the period of Federal control the Pere Marquette earned about 126 per cent of the standard return. It has paid 5 per cent on about $11,200,000 of prior preference stock that was bought and paid for in cash. That is a prior preference over preferred and common stock. This dividend is declared regularly, August and January. It has been declared for this month, and has been earned.

About 80 per cent of the Pere Marquette revenuue is from freight and 20 per cent from passenger service. Its annual gross revenue from freight business is about $27,000,000. If it gained 1½ per cent by the inclusion of the New England lines, that amounted to about $389,000.

Witness cannot fix the establishment of any divisions with the New England roads as later than 1900. The less than carload freight of his road amounted to about 8½ per cent of its tonnage, and about
19 per cent of its ton miles. It gets a very long haul on this
1013 tonnage. Quite a good deal of it is furniture from Grand Rapids and vicinity. A large amount of it is stuff that comes from New England. On some of it the Pere Marquette gets a haul for the full length of its road.

Witness has in mind that the less than carload business on the New Haven road amounts to 18.5 per cent of its tonnage. The average rail haul on all freight on witness' road is 170 miles. The average on the New Haven is 111. In the distribution of Pere Marquette tonnage between different kinds of products, 41.3 per cent is products of mines, mostly coal. The Pere Marquette does not handle any ores, to speak of. The "products of mines" would include over 25 per cent of bituminous coal.

The net railway operating income of the Pere Marquette from March 1st to November 30, 1920, nine months, showed a surplus of $1,037,962. It showed a surplus in November of $406,384. You cannot always tell by the figures that you see. There are a good many things hidden in figures.

Witness' Exhibit 109 includes the Boston & Albany, which has a very high traffic density. If it were eliminated the New England average would be approximately 1,000,000. Witness' Exhibit 110 also includes the Boston & Albany, which has the lightest density in passenger traffic of any New England road. If eliminated it would substantially reduce the average for New England.

Witness agrees that the situation of both the Michigan roads and the New England roads with reference to coal for their own
1014 consumption is made a good deal harder because they have to pay the addition to the coal rate to them, which the roads in the neighborhood of the coal mines do not suffer from.

As long as this scale of rates lasts it affects both New England and Michigan. Witness would think that if additional burdens which are of a permanent nature have been, through no fault of their own, put upon roads on one side of the junction point, which are not common to the roads on the other side, it is just call for a revision of the divisions. There would certainly be no objection to taking the matter up. It is not necessarily an indication that divisions were fair because they were established many years ago and were worked under for a considerable period without complaint. Possibly it is a pretty good indication. They have not been worked under without complaint.

Witness would think that if these rates or divisions which were established 20 or more years ago without reference to a great many conditions which have since come into operation, which apply peculiarly to the New England roads, and do not apply to the roads in trunk line territory or the C. F. A. roads in the main, it is legitimate to ask for an adjustment of those divisions. Witness cannot say that New England's divisions ought to be increased. He cannot say that if they have had new burdens put upon them since the estab-
1015 lishment of those divisions, it is obvious that they should be increased. Witness is not combatting the position of the New England roads that their divisions should be increased, but he says that in actions before the Commission the case of the Michigan lines is exceptional, and that they ought to be excepted from any order that ought to be made.

Redirect examination:

Witness could not say whether, excluding Michigan, the New England roads ought to have larger divisions than they have at the present time. With reference to the divisions between the Pere Marquette and the New Haven, witness has knowledge that the Pere Marquette did, a number of years ago, cancel the divisions; they were not satisfied with those divisions. Within 48 hours they got a telegram to put them back.

Witness would say that if it is true that New England, or some other territory in the United States, has acquired certain disabilities which make railroad operation in that territory more expensive than it used to be, the rates themselves ought to be increased, and that any increased revenue that they got should come from increased rates rather than from taking it out of their connections. He is not prepared to say what they need, whether they need better operation, more gross, or what. He does not know. He has not studied it.
1016 He does not care to go into it.

Witness does not know anything about whether, at the present time, the New England roads are entitled to larger divisions.

657

Referred to his exhibits Nos. 109 and 110, the witness said that if he made out of the freight traffic showing, the showing of the Detroit & Toledo Shore Line, and some of those heavy tonnage lines in Michigan, it would greatly reduce the tonnage and make an entirely different showing as to the average. He would think it is fair to cut out those—for instance, the Michigan Central—as to cut out the Boston & Albany.

Asked whether the figure of $389,000, representing an alleged benefit to the Pere Marquette Railroad, arising from an increase of 1½ per cent. on its freight revenue, secured in connection with Ex Parte 74, was based upon an estimate for a constructive year, the witness said:

"It was based upon an actual year, ending with October, 1919. Of course, no one knows how much would be due.

"For example, if, as stated, the railroads in the Eastern group benefited to the amount of 1.48 per cent. or such a matter, which, with the increases, reduced itself to something like 1.1 per cent. on the added 40 per cent. on a reserve which had already been transferred over a year ending October 31, 1919, and if from those
1017 figures it was shown that there was a certain amount of money, a lump sum, say so many million dollars, that they were benefited by, that does not at all mean that it would be the amount of money that would be recoverable. The only money New England could hope to get would be the money that had actually been received by the roads.

As I understand, this arrangement could only be continued until the end of February, 1921. I believe that under Ex Parte 74 these rates carry on to that time. So it probably requires some action beyond that time.

"The point I want to make in answering is that we do not have any idea how much money it really is. For example, with the Pere Marquette it is $389,000, figured as being what we profited. We are going to benefit by whatever amount 1.1 per cent. would be of the freight business we do during the months to come. That is all we could benefit. You cannot apply it to the past and say we have benefited to that amount, because we have not. We can only benefit as our business goes on. So, instead of being $389,000, it might be half of that. From the way our business is in January, as compared with October, it is half."

The estimate referred to was based on the assumption that the Pere Marquette and other roads in Central Freight Associa-
1018 tion territory would get a 40 per cent. increase. Witness' road did not get a full 40 per cent. on all its traffic. On its interterritorial traffic it got 30 per cent. less on business with the South and West. Witness' road was not properly maintained by the United States Government during the Federal control period. A proper charge was not made on that account to operating expenses during that period. It has a claim pending against the United States Government at the present time for under-maintenance. If that maintenance had ben properly done and the charges made to

the proper account, the showing of the Pere Marquette during Federal control would not have been as favorable as it appeared from the books. The Pere Marquette at the present time is not earning as much as 5½ per cent. on its property investment. Witness does not know exactly what it is earning, but witness thinks it is quite a little less.

Recess until 2 P. M.

AUGUST L. SORENSEN, a witness heretofore examined, was recalled and testified further:

Cross-examination (continued):

In constructing witness' Exhibit No. 97, he did not take into account the fact that any of the traffic of his road had been
1019 diverted. He applied the increase on the traffic for that year, the year ended June 30, 1920, in the same manner that he understood Brigham Exhibit No. 3 was prepared. If there is any change in the traffic,—trend of traffic or volume of traffic—it would make a difference in the result.

Witness' Exhibit No. 96 shows that the net railway operating income on the investment of $477,000,000 was $7,823,000. The New England roads' net railway operating income on an investment of $838,000,000, was only $800,000 more, according to the figures shown.

Referred to his Exhibit No. 98, and the first column, showing maintenance of equipment as 30.6 per cent., and asked how he explained so large a figure as that, the witness said:

"During the period of Federal control the accounting as regards the repairs to cars was not handled on the same basis as we do under private management. That would have a decided effect on the ratio of maintenance of equipment to your gross revenues. As to how that compares with the other percentages of the other lines shown there, I could not say, and the accounts were not kept in such detail that it would be procurable."

Witness would not want to say that the figure of 30.6 per
1020 cent, is not a normal figure. It would naturally increase the same with the Erie as it would with any other road.

During the period of Federal control Erie cars were off the line in the same proportion if not greater than possibly other lines, and they were repairing the other people's cars that were on their line sufficiently to keep them maintained, witness assumes, in the same degree that other lines were. Witness does not believe the Federal control period figures can be entirely explained without a careful analysis of them, which he has not made.

Referred to his Exhibit No. 99, the witness said that the deficit shown for the New Haven for the 11 months of 1920, as compared with their net railway operating income for 1919, is greater in dollars and cents than the Erie. Witness does not know that the Erie

makes the worst showing of all the trunk lines. It makes a bad showing. Witness cannot indicate any that is worse among either the Trunk or C. F. A. lines.

CLAYTON E. HILDUM, called as a witness for the defendants, testified:

Direct examination:

That he is Comptroller of the Lehigh Valley Railroad, and has prepared certain statistical exhibits for this case.

Referred to the testimony of Mr. Brigham, on pages 1854 and 1855 of the record, undertaking to state the relative increases
1021 that had been received by certain of the New England roads as compared with the increases received by certain of the trunk lines, witness said that he had determined that Mr. Brigham's per cent. of increase is a reflection of both the change in rate and the change in tonnage.

Witness has made computations, which he is about to give the result of, eliminating the tonnage factor and indicating just what the percentage of rate increase received by each of the roads mentioned by Mr. Brigham amounted to. Those percentages are: New Haven, 32.4; the B. & M., 24.2; the B. & O., 31.8; the New Jersey Central, 35.2; the D. & H., 41.8; the D. L. & W., 26.5; the Erie, 39.5; the Lehigh Valley, 28.5.

The percentage of rate increase received by the New Haven, for example, is greater than that received by the Baltimore & Ohio or by the Lackawanna, or by the Lehigh Valley.

Asked to explain the method by which he had made his computations, the witness said:

"We compared the tons one mile for the three months; computed the per cent. of increase in tons one mile, and applied that per cent. to the 1919 revenue for the three months; deducted the result from the 1920 revenues, and then computed the per cent. of in-
1022 crease."

The reason for getting an entirely different result from that which Mr. Brigham got is the fact that the New Haven tonnage, for example, was less in 1920 than in 1919. Practically all of the other roads except the B. & M., had a substantial increase in tonnage during the 1920 months. The B. & M. increase was less than 2 per cent.

During this period, which is the subject of comparison, the bituminous coal strike was in effect, and very greatly reduced both the tonnage and revenue of a number of these roads.

Statements offered by the witness were received in evidence and marked Defendants' Exhibits Nos. 111 to 126 inclusive, Witness Hildum.

Asked to comment on these exhibits, the witness said:

"A number of these exhibits do not show the source from which they were obtained, and I will read that into the record as we go along.

"Exhibit No. 111 was secured from data filed with the Bureau of Railway Economics by the carriers in the 15 per cent. Case in 1917 for columns 1 to 5 inclusive. For the calendar year 1919 and the 10 months of 1920 the information came from carriers' reports to the Commission in so far as the earnings were concerned, and the
1023 property investment figures were those used in Ex Parte 74.

"It is significant that during this period of years, 1913 to 1917, the rate of return is practically the same for both groups, the New England lines' average being slightly in excess during three of these years. It is considered probable that these years represent a period of normal times, and that a return to normal times will again place the New England roads on an equal footing with the lines in this district.

"The returns for 1919 and the 10 months of 1920 indicate the convulsion through which the railroads have been passing. But the poor results shown by the New England lines are not more startling than the rate of return computed for standard lines west of the Hudson.

"The deficit ratios are shown for comparative purposes, and it is to be noted that the New Jersey Central and the Pennsylvania deficit ratios exceed the averages for the whole of New England. Prior to the beginning of Federal control the New Jersey Central and Reading were among the highest. For 1919 and 1920 the rate is relatively very low. This is significant because of the fact that the Central Railroad has one of the heaviest interchange accounts with the New Haven."

This exhibit shows that for the first 10 months of 1920, the percentages of deficit to property investments of the Lehigh Val-
1024 ley, of the Pennsylvania and of the Jersey Central were all worse than that of the Erie, as well as one or two other smaller lines. It also shows that the deficit of net railway operating income as related to property investment was considerably worse for the Pennsylvania and the Jersey Central than for the New Haven. The two chief roads interchanging with the New Haven are the Pennsylvania and the Jersey Central.

The witness continued:

"I might make the further comment in connection with that exhibit that this last column, if we followed the idea of the complainants, might give us ground for extreme pessimism. We might work out some figures for the coming year that would be very startling. I would prefer to be more optimistic than that."

While the method employed in the New England exhibits would show a startling result, witness does not think the method is sound, as applied to the future.

The witness continued:

"Exhibits Nos. 112, 113 and 114 should be considered together. They were compiled from the carriers' annual reports to the Commission. They compare the average revenue per ton, the average revenue per ton mile and the average haul for the 5 years ended 1919.

Despite the fact that the average haul of the New England
1025 lines in 1919 was only 112 miles, as compared with 145 miles for the other lines, the revenue per ton was 18 per cent. greater—$1.52½ compared with $1.287. The revenue per ton mile of the New England lines was 53 per cent. in excess of the similar unit for all other lines.

"On this exhibit six lines show decreases in revenue per ton mile in 1919 as compared with 1918. The only one, however, which shows a substantial reduction in revenue per ton mile is the New Haven—1.729 cents for 1919 compared with 1.557 cents.

"That is sheet 113; comparing the figures in the last two columns for the New Haven."

That abnormal result is rather difficult of explanation. It might be the result of the change in method of compiling ton miles which was made effective by the Railroad Administration before 1919. It might be affected by the change in the character of the tonnage. For instance, if water-borne traffic were curtailed to any considerable extent, it would undoubtedly cause a change in the average haul, because the New England lines get a longer haul on business interchanged via the Hudson River junctions than they would if the same traffic were brought to New England ports by water.

The striking decrease in revenue per ton per mile of the
1026 New Haven, as shown on Exhibit 113, is explained to a considerable extent, probably entirely, by the striking increase in average haul per ton as shown on Exhibit 114.

Witness is not prepared to explain how it happens that the New Haven's average haul per ton increased 22 miles in 1919 over 1918. That change in the average haul per ton makes all New Haven ton mile statistics and revenue ton mile statistics abnormal, for 1919, as compared with any previous year.

The witness continued:

"It is to be noticed that in Exhibit 112 the earnings per ton did substantially increase 1919 over 1918.

"Exhibit 114 shows unusual increases in average haul on the part of two or three roads, notably the B. & O. and the Erie. The New Haven, however, stands alone with an increase of nearly 22 miles, or 23.7 per cent.

"This situation is further illustrated by Exhibit No. 115, which was also compiled from carriers' reports to the Commission. The lines included on this exhibit are all those having an average haul between 50 and 150 miles, and it graphically displays the relation between the revenue ton mile and the average distance hauled. It is noticed that the Maine Central, the New Haven, the Bangor &

Aroostook and the Boston & Maine are quite substantially in excess of the earnings of carriers enjoying a similar average haul.

1027 "Exhibit 116 was also compiled from the annual reports to the Interstate Commerce Commission. It compares through the medium of the switch facilities and the yard switching locomotive mileage, the terminal service of the New England and other eastern district roads. In view of the emphasis laid upon this particular point in the complainants' testimony, attention is called to the fact that the ratio of switch tracks to all tracks operated is substantially greater outside of New England than in it. The average ratio of switching locomotive miles to total locomotive miles for the other eastern district roads is also greatly in excess (24 per cent) of that for the New England roads.

"Comparing the New Haven with the principal connections in trunk line territory, the Pennsylvania switch tracks are 36.4 as against the New Haven 34.34. The ratio of switching mileage is 25.53 to 17.78. The Central Railroad of New Jersey is still more striking; the ratio of switch tracks is 46.27 to 34.34; and the ratio of switching mileage is 24.69 to 17.78.

"It is noticeable that the New England carrier showing the greatest ratio of switch tracks to all tracks is the Boston & Albany. Possibly this fact has a direct relation to the higher earning power of the Boston & Albany compared to the other New England lines.

1028 The line thus fully equipped evidently escapes the difficulties recited in the New Haven annual report for 1919, where attention is called to the fact that 'inadequacy of capacity results in congestion, delays to trains, and necessitates much extra work and duplication of endeavor to accomplish the final result. Service under such conditions is unsatisfactory to the public and uneconomical to the railroad.' The last two sentences are quoted from the annual report of the New Haven.

"Exhibit 117 was also, like the preceding exhibits, prepared from the Interstate Commerce Commission reports. This exhibit shows the miles of road, total property investment, and the investment per mile of road as of October 31, 1919. The average for the other eastern district roads is $148,630 per mile, while for the New England lines the average is $106,888 per mile. This is possibly significant as indicating the concentration of effort in the direction of improving transportation facilities. In view of the testimony heretofore given, it is quite evident that the transferring of a substantial amount from 'other investments' to 'investment in road and equipment' would have a salutary effect on the earning power and financial condition of the New England roads. Here again there is an indication of more complete facilities possessed by the B. & A., which shows the highest investment per mile of line in the group.

1029 "Before referring to Exhibit No. 118, I would like to make some remarks with respect to Brigham Exhibit No. 6.

"This exhibit indicates that the New England lines will, in the aggregate, lack $24,000,000 of receiving a return of 6 per cent. on their invested capital. From Brigham Exhibits Nos. 10 and 11 we

have made a computation indicating the distribution of New England freight traffic to be as follows:

"Local, $33,564,446, or 15.13 per cent.

"Interline New England, $21,393,265, or 9.64 per cent.

"Interline Canadian, $9,889,078, or 4.46 per cent.

"Interline trunk lines, $57,383,570, or 25.87 per cent.

"Adding the passenger revenue of the New England roads, $75,588,863, or 34.07 per cent., and the total B. & A. revenue of $24,029,908, or 10.83 per cent., we have a total of $221,849,130.

"It is quite apparent that the amount of the New England deficit of $24,000,000 should be made up pro rata from these various classes of traffic, and not assigned to the interchange traffic alone. The result would be as follows:

"Local, $3,701,533.

"Interline New England, $2,358,413.

"Interline Canadian, $1,091,133.

"Interline trunk lines, $6,329,059.

"New England passenger, $8,335,178.

1030 "Boston & Albany, $2,649,544.

"Or a total of the amount called for by the exhibit of $24,464,860.

"If there is any merit whatever in the contention of the New England lines with respect to this $25,000,000 theory, the amount in which the trunk lines are interested is $6,329,059 only. Otherwise the adjustment would be subject to the criticism that rates in trunk line territory were too high, and that industries there were being taxed in order that industries in New England might escape an increase in rates."

Witness is not conceding or recognizing that the theory on which the complaint rests has any merit, but is just making some interesting and significant computations from those figures. His point is that taking the theory at its face value, the conclusion from it would be that somebody outside of New England owed something like $6,000,000 to the New England carriers, rather than the larger item that they have been discussing. That is the only item which might, assuming the theory to be correct, be applied to the interchange traffic with the trunk lines.

The witness continued:

"Exhibit No. 118 calls attention to a peculiar situation with respect to the assumed benefit bestowed upon the defendants by the New England lines. Assuming for the sake of argument that

1031 the so-called $25,000,000 theory is correct, the benefit to those lines which are shown in Brigham Exhibit No. 6 to earn above 6 per cent. on their investments exists to the extent of 50 per cent. only, since under the provisions of the Transportation Act 50 per cent. of such excess will be recaptured by the Government. The statement shows these lines benefited to the extent of $11,337,717, but half of this is a benefit not to the lines shown in

the exhibit, but to the United States Government. Only $5,668,859 of the total will accrue to the lines listed in the exhibit."

The theory of these computations about 1.48, and generally computations based on Brigham Exhibit No. 6, is misleading if it is used to show what is going to happen subsequent to the increase in rates. The theory, as witness understands it, is only being applied to the facts as they were presented to the Commission before the rate increase was granted.

Referred to Exhibit No. 118, and the figure shown opposite the Central Railroad of New Jersey, and the possible implication to be drawn therefrom that the Jersey Central was going to make $240,000 or so, which would be turned over to the Government under the recapture clause, and asked whether the actual performance of the Jersey Central since September 1st, as shown in his other exhibits, warrants any such inference, the witness said:

1032 "No. I think Exhibit No. 111, where the Jersey Central is shown for the first 10 months of 1920 to be earning a deficit ratio of 3.21 on its property investment, is sufficient indication that there will not be any excess to divide with anybody."

A consideration of Exhibit 118, and Brigham Exhibit 6, and such exhibits, in the light of witness' Exhibit 111, corrects the erroneous conclusions that would be drawn from the theoretical exhibits.

The witness continued:

"Brigham Exhibit No. 6 further shows that for the various subdivisions of Official Classification territory the per cent of increase required is as follows: New England, 47.407; Trunk Line, 29.767; Central Freight Association, 24.431.

"In preparing the data for this exhibit, in which I had a part, we found it impossible to make an exact separation between Trunk Line and C. F. A. territories. The Baltimore & Ohio, the Erie, and the New York Central, which included the old Lake Shore Line between Buffalo and Chicago, were included in Trunk Line territory. The subsidiaries of the New York Central, however, such as the Michigan Central, Big Four, and others, were included in C. F. A. territory, or in accordance with their location, wherever that might be.

1033 "Column No. 9 of the supplemental sheets of this exhibit shows the needs of the individual roads for additional revenue on the basis of the ratio of such needs to total freight revenue. It is interesting to notice that the following lines show greater need in this regard than the average for New England roads which, as now filed, is 47.407. The Buffalo & Susquehanna needed 48.93 per cent; the Ontario & Western, 92.67; the Pittsburgh & Shawmut, 70.03; the Pittsburgh, Shawmut & Northern, 164.69; Staten Island Rapid Transit, 51.71; the Ulster & Delaware, 96.11; the Western Maryland, 56.73; the C. I. & W., 77.71; the D. T. & I., 76.28; Wheeling & Lake Erie, 48.42; the Virginian, 48.70. If the distribution of revenue is to be based on needs of the carriers, rather than on the

service performed, the plight of these carriers just mentioned must be very carefully considered.

"Column No. 8 on sheets 3 and 4 of the Brigham Exhibit represents the apportionment of the total $24,464,860 on the basis of 1.48 applied to the freight revenue of each carrier. It is of interest to compare the amounts shown in this column with the figures shown in Column 10, which indicate the relation of the theoretical return after the increases were granted to the amount necessary to provide a return of 6 per cent on the property investment. The fol-
1034 lowing striking examples are noted:

"The Baltimore & Ohio, on the basis of the application of 1.48 per cent to its freight revenue, will be called upon for a contribution of $2,036,965, although in Column 10 it is shown that the Baltimore & Ohio will lack $10,652,775 of earning a 6 per cent return.

"The Chesapeake & Ohio, on the other hand, will be called upon to make a contribution of $882,640.

"The amount they will earn or the amount they are supposed to earn on the basis of this theoretical computation, is $7,337,063.

"The Lackawanna will contribute $777,285, while they will earn in excess of 6 per cent, $10,498,606.

"The Erie will be called upon to contribute $1,237,998, although they lack $13,701,630 of earning a 6 per cent return.

"The Pennsylvania Railroad east will be called upon for $4,097,066, although they will lack $28,347,266 of earning a 6 per cent return.

"The same result would be brought about by a comparison of the amounts produced by the application of the suggested arbitraries to the interchange traffic with the New England lines. The lines which would be called upon to carry a very large part of the burden
1035 or payment to the New England lines are in the same need as the New England lines themselves. This will be brought out clearly in a subsequent exhibit.

"I will now take up Exhibit No. 119, the details of which are taken from Brigham's Exhibit No. 6. This shows the needs of class one carriers in a geographical group as distinctly outlined as the New England group, and set apart and administered during Federal control as the Allegheny region. The inclusion of this group with other lines of Official Classification territory increased the per cent from 26.552 to 29.461, or 2.909 per cent benefiting the other lines to a much greater extent than the inclusion of the complainants' lines. Presumably if the New England lines' proposal is considered favorably, we may expect this group, in view of its needs, to make a similar application. This, in turn, will be followed by another interminable series of adjustments to secure from the roads benefited their proportion of the increase brought about by the inclusion of this region in the larger group."

Witness thinks that this exhibit suggests that if such an adjustment were made, there should be a separate adjustment made as between the New England lines themselves, based on their needs, to

earn a net return of 6 per cent on their investment. That is, if the New Haven needed 58.46 per cent on its freight and switching revenue to earn a net return of 6 per cent, witness thinks it would be entitled to receive from some of the other carriers in New England the difference between that per cent and 29.461, or 29.10. That is for the same reason as indicated by the complainants in this case, assuming that that proposal is sound.

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If that doctrine were carried to its logical conclusion, and the New England lines equalized, to pursue it to its logical result, he would have all roads making readjustments to produce a dead level of return, with the result that the roads which had been efficiently managed and economically managed would be robbed of the reward that is due them as a result of their past and present relative efficiency and economy.

The witness continued:

"Exhibit No. 120 is also taken from the details of Brigham Exhibit No. 6. It shows, in comparison with Exhibit No. 119, the other extreme, the group of line administered during Federal control as the Pocohontas region. The per cent of increase required by Official Classification territory, excluding the Pocohontas lines, was 30.586, and this was reduced by their inclusion to 29.461, or 1.125 per cent. The inclusion of this so-called group reduced Official Classification territory—or, I should say, possibly, Eastern District territory—per cent by an amount only slightly less than the inclusion of the New England lines increased it. I think attention ought to be called, however, to the fact that even in this small group of lines, the difficulties of this situation are emphasized, inasmuch as here also will be found a line, The Virginian, which will not secure 6 per cent return on its investment, and which would be unreasonably penalized by being called upon to pay any amount to the complainants. The conclusion of a consideration of these statements, together with Brigham Exhibit No. 6, is inevitable that if any consideration whatever is to be given to the argument of the New England lines that they are entitled to reimbursement from the lines west of the Hudson River because of their inclusion as a part of Official Classification territory in Ex Parte 74, a similar course of reasoning must be applied to each individual group and to each individual line which was benefited or otherwise by inclusion in the general group. This argument, carried to its logical conclusion, would mean that each road earning less than 6 per cent might legitimately call upon its more fortunate connections for a contribution to equalize its net income. The final result would be nothing more nor less than a general pooling of all earnings and a re-allocation to individual lines on the basis of investment. Even such a result might be borne if it were not for the fact that it means a pooling, not of gross earnings, but of net, and such a practice, of course, would destroy every incentive to economical operation."

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All the figures on which witness' Exhibits Nos. 119 and 120 are based are taken from Brigham Exhibit No. 6.

The witness continued:

"Exhibit No. 121 represents the results of the application of the special arbitraries suggested by the complainants to the traffic moving during October, 1920. The amounts shown in the second column for the defendant lines will be substantially increased by a division of the miscellaneous item of approximately $8,000,000, shown at the bottom, which will be available later. The figures shown, however, are illustrative of the difficulties inherent in the situation. This second column shows the amounts which would be assessed against the defendant lines through the application of the arbitraries; and the third column shows the ability of the carriers to pay, or the lack of it. The fourth column shows the prorata distribution in accordance with the $25,000,000 theory.

"In the upper part of the statement, it is noticed that the B. & A. will receive from the application of the special arbitraries approximately $5,895,000, although its needs amount to $51,000.
1039 The B. & M. will secure $7,595,151, while its needs are $2,507,444. On the other hand, the New Haven will receive only $8,756,000, as against its requirements of $13,946,930. I might call attention to the fact that 50 per cent of these excesses, aggregating more than $10,000,000, will be subject to recapture by the United States Government under the Transportation Act. These are totally imaginary excesses. The Government will, in fact, secure nothing at all.

"As illustrative of the situation west of the Hudson, the B. R. & P. will contribute $281,000 from the application of these special arbitraries, while its deficiency, with respect to a 6 per cent return, is $979,587, and its prorata share of the $25,000,000 fund would be $195,126. The D. L. & W. would contribute $915,055, from a theoretical excess of $10,498,606, while its prorata share would be $777,285.

"The Pennsylvania Lines east would be called upon to pay $2,077,000 as the result of the application of the arbitraries, while its deficit is $28,347,266, under a 6 per cent return, and its prorata share of the $25,000,000 fund would be $4,097,000.

"The New York Central is $2,073,430, resulting from the arbitraries. Its excess——"

Witness might have mentioned some C. F. A. lines in the
1040 same way he has mentioned these trunk lines. He did not select them because they were trunk lines, but because they were on this Exhibit No. 121, largely due to the fact that they are immediate connections of the New England lines, and therefore the amounts resulting from application of these arbitraries affect the immediate connections to a much greater extent than the others.

The C. F. A. lines which would be called upon for a contribution, are gathered up in the last line, which shows that lines under "Miscellaneous Carriers" would be called upon for $8,672,000, said lines theoretically having an excess of about twelve and a half million. That would include most of the C. F. A. lines. One or two of the lines which were affected to a considerable extent are shown here;

the Nickel Plate, for instance, shows that it would be called upon to pay, through the application of these arbitraries, $217,253, while its excess over a 6 per cent return would be $4,701,000, and its prorata share would be $319,892.

The preponderance of any such burden on the lines west of the river would necessarily rest chiefly upon the immediate connections and the other trunk lines interchanging with the New England carriers.

That is probably illustrated very effectively by the Delaware & Hudson, which, due to the large amount of traffic originating
1041 on its line, would be called upon in this adjustment to pay $3,550,000, while its prorata share would be only $440,000. It would have no means, in so far as this interchange traffic passing over its line is concerned, to pass that burden on to anyone else. This is simply the prorata share of the Delaware & Hudson. The amount that it would be chargeable with would be double even the theoretical excess that has been considering, which is approximately $1,800,000.

These results clearly indicate that with the application of these arbitraries the difficulties have only begun. The lines west will be called upon to contribute without regard to the reasonableness of the charge, their ability to pay, or the prospect of recouping their losses by passing them on to other carriers which have received similar or superior benefits. On the other hand, the New England lines will receive returns from the adjustment out of all proportion to their needs, and there certainly is grave question as to the justification of payments to the B. & M., for instance, with the understanding that its excess would be in turn distributed to other New England lines with which the lines producing the revenue have no connection, and with which they interchange no traffic.

Asked concerning Exhibit No. 122, the witness said:

1042 "While the carriers in Eastern Districts applied for an increase of 39.7 per cent. on all freight revenue, and 20 per cent. on passenger, etc., these increases are not, in fact being secured because of the provision in the award of the Commission that a 33½ per cent. increase only would apply to inter-territorial traffic, because of a lack of cooperation on the part of state commissions, the continuance of fixed differentials, etc. These adverse conditions are much more pronounced in the territory of the defendants than in New England, where no state authorities have interfered, and where there is very little traffic moving on through rates to and from other than eastern district territory.

"Exhibit No. 122 shows the estimated losses of trunk lines and Central Freight Association lines because of these influences. As a result, freight revenue has been increased only 36.06 per cent., instead of 40 per cent., and passenger revenue 18.08 per cent., instead of 20 per cent. If eventually the state rates are all brought up to standard, the percent of increase for freight revenue will be only 36.97, while the passenger increase will be approximately 20 per cent. But, in the meantime, large losses have been sustained

which cannot be recouped by making the rate adjustment, if it comes, retroactive, as complainants suggest with respect to
1043 the decision in this case."

From a careful computation based on the tonnage figures furnished by the Boston & Maine, witness thinks that the percentage increase which the Boston & Maine realized was a trifle less than 39 per cent., based on a constructive year ended October 31, 1919.

Asked to indicate the reasons why the percentage of increases realized by the trunk lines is, in his judgment, materially less than that realized by the New England lines, the witness said:

"The columns on this Exhibit 122 show the reasons quite clearly. The last three columns indicate the losses due to the failure of states to permit the new rates to take effect, and the losses due to other reasons. It is evident that the inter-territorial increase of 33¼ per cent. affects the lines west of the Hudson River to a very much greater extent than the lines east; for instance, the Wabash Railroad, which runs out into Western territory. It is very greately affected, as well as all of the lines that reach the border between the different territories. The lines in Trunk Line territory proper also have a very much larger proportion of inter-territorial traffic moving on through rates than the lines in New England."

1044 In many instances where there are through rates inter-territorially, the New England lines do not participate in such through rates. There is a great volume of traffic coming to the Atlantic Seaboard, New York, and other ports, which does not pass through New England, but moves on through rates from other territories. The volume of transcontinental freight, for instance, moving to Trunk Line territory is much greater than that moving to New England.

Asked to proceed with Exhibit No. 123, the witness said:

"Exhibit No. 123 shows the effect of applying these ratios of increase that are produced by exhibit 122 to the statement which was entered as Brigham Exhibit No. 8. We have made changes only in items Nos. 4 and 5 and in the conclusions. Instead of an excess above 6 per cent. of $25,004,444, there is a deficiency of $51,182,332, making a net difference of $76,186,776. That estimate as to deficiency takes no account whatever of the diminishing volume of traffic.

"That is simply based on the application of a percent to revenues which have already been produced in a previous year. This exhibit is based on the constructive year ended October 31, 1919. This exhibit demonstrates that there exists no fund in excess of a 6 per cent. return, as has been alleged, but that the lines west of the Hudson will fail, by a substantial amount, to secure the re-
1045 turn called for by the Transportation Act."

Referred to his Exhibit No. 124, the witness said:

"This exhibit is based on special reports from carriers in Trunk Line and C. F. A. territory, numbering in all 29, making an esti-

mate of the effect of the wage award, the rate increases, and all other factors having an influence on net railway operating income, as applied to the known results for the year ended October 31st, 1919. Instead of a return of 6 per cent. or $452,977,000, it is estimated that the net result will be $343,753,000, an increase of 4.55 per cent. 15 of the 29 carriers reporting will probably receive less than 3 per cent. return, and the total deficiency for the group will be $109,223,000. That, again, is on the theoretical basis of October 31, 1919. This exhibit suggests that even a road with the financial standing and record of the Philadelphia & Reading, even on the constructive basis, would show a deficit of eight one thousandths of one per cent. There are several others to be noticed there which are very low, of these standard lines.

"Exhibit No. 125 gets back to the actual. It shows the results of operation for the first 10 months of 1920. The average operating ratio of trunk line roads was 100.24, only ninety-five one-
hundredths of one per cent. less than that of the New Eng-
1046 land. lines, and it is noted that the operating ratio of the
New Haven is less than the average for the whole Trunk Line territory. 13 trunk lines show a relative cost of operation in excess of the average for New England roads, including such important lines as the New Jersey Central, the Erie, the Lehigh Valley, Western Maryland, and the Pennsylvania."

The operating ratio of the New Haven, as shown, is 99.99. For the chief road that interchanges with it, namely, the Pennsylvania, the operating ratio is 107.12. The next road in volume of interchange is the Jersey Central, 105.28. The Erie is 109.22. The Lehigh Valley is 107.63.

In Exhibit No. 126 the witness is taking another plunge into pure theory.

The witness continued:

"Exhibit 126 gives a little further consideration to the figures presented to the Interstate Commerce Commission in Ex Parte No. 74, and offers some food for thought in the way of comparisons between what happened and what would have happened had the New England lines been treated as a separate group, and had some other groups of lines been treated separately. The first column shows the total Eastern district, and represents exactly the figures which were presented to the Interstate Commerce Commission, calling for a
balance of freight revenue increase of 39.75 per cent. In
1047 Column G, the Eastern district is shown, excluding the seven
New England roads which are complainants. This shows a percent of increases required of 38.55, or 1.2 per cent., instead of the 1.48 per cent., as shown in Brigham Exhibit No. 6. This 1.2 per cent., applied to the freight revenue shown as Item No. 2 in Column G, equals $20,377,678, a decrease of approximately $4,000,000 in the amount shown in Brigham Exhibit No. 6. If, however, we take into account Item No. 11, the ratio of the total deficit—

"Before proceeding to that, it might be of interest to note the fact that the inclusion of the Pocohontas district, Column H, bears

exactly the same relation upward as the New England lines do downward. In other words, Column G, compared with Column 1, is 1.2 per cent. less. Column H, compared with Column 1, is 1.2 per cent. more."

That means that the inclusion of the Pocohontas group made a difference of 1.2 per cent. to the rest of the region downward. In other words, the rest of the Eastern district received an increase of 1.2 per cent. less because of the inclusion of the Pocohontas group; and again, the rest of the Eastern District received 1.2 per cent., rather than 1.8 per cent., more, because of the inclusion of the New England lines, assuming that this theory has any significance.

1048 If witness excluded from the Eastern group both the Pocohontas group and the New England group, the remainder of the group would show exactly what Column 1 shows in Item 19, 39.75 per cent. In other words, the 1.2 which the New England lines added would be exactly offset by the 1.2 which the Pocohontas group took away by their inclusion, and the net result would be precisely the same as including both of them. The last column, unfortunately, was made showing a deduction for the New England 10 roads, instead of 7. Had the last column shown a deduction of 7 New England roads and the Pocohontas roads, the final figure on the statement of 39.58 would have been 39.75, exactly the same as the first column.

Asked whether that is a difference in percentages, or an actual difference in actual freight revenue, the witness said:

"A difference in per cent; that the New England lines benefited, theoretically, the group 1.2 per cent. The Pocohontas lines penalized the group 1.2 per cent. So that if they were both taken out, the remainder of the group would still be 39.75 per cent. This is significant because of the fact that there is practicaly no interchange of traffic between the Pocohontas lines and the New England lines. One is on one side of the group and the other is on the other side of the trunk line group."

1049 Witness does not intend to give the impression in presenting the exhibit, and in showing on this exhibit and on Exhibit 120, the Pocohontas group, that the Pocohontas group has received anything that it is not entitled to.

The witness continued:

"The Pocohontas group is a part of this Eastern district. It always has been a part of Official Classification territory, a part of Trunk Line and C. F. A. territory, and presumably it should be included with the other roads. Attention might be called to Exhibit No. 122, which shows the losses due to the increases of less than 40 per cent. in the last column. It is probably significant that the Chesapeake & Ohio, which is shown in Brigham Exhibit No. 6 as receiving a very substantial return in excess of its 6 per cent., is very seriously affected by the application of the 33⅓ per

cent., and, as a matter of fact, its excess of practically $7,000,000 above a 6 per cent. return is more than wiped out by its losses due to the 33⅓ per cent. The same is exactly true of the Norfolk & Western, which loses more through the application of the 33⅓ per cent. to interritorial traffic than it gains by being a part of the group.

"I have one further thing to say about Exhibit 126. Item No. 11 shows what the ratio of the total deficit, including the wage
1050 award, is to the total operating revenue of the various lines. A comparison of Column 1, or Column B, rather, with Column G, shows that the inclusion of the New England lines increased the ratio from 32.71 to 33.28, a difference of .57 of one per cent. It is our thought that this is the significant thing about this statement, and the significant thing about the whole situation, that the amount by which the New England lines benefited the trunk lines should be measured not by the per cent of deficiency to freight revenue, but by the total per cent of the deficiency to total operating revenue. Fifty-seven hundredths of one per cent. applied to Item No. 1 in Column G produces $13,488,748, and if there is any merit in the contention that the New England lines have benefited the trunk lines and C. F. A. lines, it is measured by this amount rather than the $25,000,000 shown by Brigham Exhibit No. 6."

Witness' figure, item 2, Column G, $1,698,000,000, is not exactly the same as the figure showing the total freight and switching revenue for the trunk lines and C. F. A. lines in Mr. Brigham's exhibit, due to the fact that Brigham Exhibit No. 6 does not include every line that was included in the presentation to the Interstate Commerce Commission. It is somewhat in excess of the amount shown in the Brigham exhibit, because that exhibit does not show all of these lines.

1051 Witness' Exhibit No. 119 shows that the deficit for the Pennsylvania Railroad lines west was $4,430,959, so that the deficit for the Pennsylvania System, as shown on these exhibits, aggregated approximately $32,000,000. That amount of additional revenue had to be raised in the Eastern district, as compared with a deficit in New England of something less than $25,000,000. So that, applying the theory of the seven complainant New England railroads, the Pennsylvania System benefited the Eastern group to the extent of approximately $32,000,000. The percentage would be considerably more than the 1.2 per cent. by which the New England lines theoretically benefited the trunk line and C. F. A. territory, but somewhat less than 2.9, shown on Exhibit 119. It would be over 2 per cent.

Excluding all other considerations, if there were anything in this benefit proposition, the Pennsylvania benefited the rest of the Eastern district by its inclusion with the rest of the Eastern district more than the New England lines benefited it.

The mileage of all the New England roads on this exhibit 117 is 8,201 miles, and the Pennsylvania's mileage is 11,120 miles. The computation represents the estimates made last spring of what might

be expected to result from certain increases applied to the
1052 figures for the year ended October 31, 1919.

Witness' Exhibit 126, opposite Item 2, shows the amount shown in the final application of the carriers to the Commission in Ex Parte 74; and the percentage 39.75 at the bottom of the first column is exactly the percentage that the Eastern district carriers, in that final application represented as indicating their needs.

The Pocohontas roads, which are the Norfolk & Western the Chesapeake & Ohio, the Virginian, the R. F. & P., and the Washington Southern are and always have been trunk lines and Central Freight Association lines, and properly belong in the Eastern group.

The real object of witness' Exhibit 126 and references to the Pocohontas group is to show, for the purposes of this case, that by excluding the five trunk and Central Freight Association lines, which serve the so-called Pocohontas portion of Trunk Line and C. F. A. territory, so located geographically that the New England interchange traffic is negligible, the other Trunk and C. F. A. lines which handle substantially all the New England interchange traffic, profited to but a slight extent, based upon the figures in Brigham's Exhibit No. 6, and to no extent whatsoever based on witness' Exhibit No. 126, by the inclusion of New England in the Eastern
group. That is the real object of separating the Pocohontas
1053 lines and including them in witness' exhibits and his testimony.

A document identified by the witness as a booklet issued by the Bureau of Railway Economics, showing statistics as to railway earnings in 1919 and comparisons of standard return with net operating income for 1919, was received in evidence and marked Defendants' Exhibit 127, Witness Hildum.

Referred to his Exhibit No. 127, the witness said:

"All through this exhibit they refer to 'net operating income.' Under the Transportation Act and Federal Control Law they named that item 'net railway operating income.' It includes equipment and joint facility rents, although it does not so indicate."

Cross-examination:

Witness thinks it is a fair assumption that the first five columns of his Exhibit No. 111 represent about normal times, and that if there was a return to normal times the New England results might be as good. Collectively, but not individually, the first noticeable thing about witness' comparison on the first sheet is that the New England lines are a little over three times worse off than the lines west of the Hudson River, as a result of 3 years of departure from
normal times. The New England figure is 3.10 and the other
1054 only .92.

Assuming that it is true that prior to the standardization of wages, the New England lines did enjoy a level of wages substantially below that which was paid by other lines, they will never recover that relative advantage. Witness has no information to that effect.

Witness understands that it is true, so far as northern New England is concerned, that they did not have to pay their men as much as the defendant lines.

As long as there is reflected on coal on the tenders of the New England roads, any increase in freight rates, they will not get back to the conditions of 1907. Just at the present time witness should rather be in the position of the New England lines, with reference to per diem, with less equipment than they need, than in the position of some of the trunk lines, with more equipment than they need, because of the extra cost of carrying the capital charge.

It is quite evident to the witness that in times of slack traffic the line which has more equipment than it needs must carry that capital charge, and, therefore, is suffering during slack times, while the road that doesn't have enough equipment does not have to carry that burden.

Witness thinks the New England roads ought to have more equipment; they ought to have enough equipment to take care
1055 of their needs. While at the present time the New Haven has some of its cars idle on its tracks because of the fact that other lines load to it their cars, the other line in turn probably has cars lying idle on its tracks because it has no loads for them. That method simply distributes the burden, instead of having the line which owns no equipment bearing it all. Witness has made no such study of per diem as Mr. Alfred, the previous witness, has made.

Witness thinks, to some extent, per diem is a burden that is inherent in the situation of a terminal road. The heavier the per diem charge is made, the more the permanent burden is increased, not alone to the New England roads, but all the terminal roads. All of the Eastern roads suffer the same difficulty. That is indicated to a very great degree by the tremendous accumulation of cars around the New York terminals in the last few years.

Referred to his Exhibits Nos. 112 and 113, and asked whether we are likely to get results that may be a little distorted if we take an average of the average—if we take the average of the receipts per ton of a road like the Bangor & Aroostook and a road like the New Haven, the witness answered: "Necessarily."

In getting the average witness divided the totals of the factors which go to make up the items in the average columns. It is not an
1056 average of averages. To get the receipts per ton they divided the tons into the revenue. They added the tons and revenue of the various lines and divided the totals one into the other to get the average. The result witness reached should not be misleading because it is a perfect average. It is not an average of these averages, but a properly computed average. These are averages for all traffic, not interline traffic alone.

Revenue per ton mile is very likely to be affected by the character of the traffic. If, for instance, there was in New England during a given period a very large movement of coal, it would be likely to show a less average receipt per ton mile than at other times; although it might produce a great deal higher revenue for the service performed, a higher aggregate.

In witness' Exhibit No. 116 he has not taken into account at all the amount of switching done by road locomotives. This is simply yard switching locomotive miles. They found that some roads were not reporting train switching and road switching separately, and they used yard switching.

The witness has no information as to whether that practice is more extensive in New England than in Trunk Line territory, that is, of having a road locomotive do switching during the run.

1057 Asked whether he included passenger switching in the second column, the witness said: "This is a total of both passenger and freight—both columns."

Referred to his first column, where he says, "Boston & Albany," which shows 36.67, ratio of switch track to all track operated, and asked whether he had any idea whether that includes any switch track mileage on long stretches of third track which were built by the Boston & Albany a few years ago, the witness said:

"It should not have included it. If it did, it is an error. In reporting to the Interstate Commerce Commission, the Commission's rules call specifically for first main track, second main track, third main track and fourth main track."

There is a reason behind the suggestion, that a large ratio of switch track to main track on the Boston & Albany might be an indication of why the Boston & Albany is prosperous; that is, the more perfect and complete facilities a road has, the higher its earnings under certain conditions could be expected to be. Witness is not laying that down as a general rule. He simply suggested that there might be a possibility that that indicated something of that sort. In getting his results in the second column, the witness used total locomotive miles in transportation service; that is, item 44, on page 506 of the Interstate Commerce Commission's report. This exhibit is sug-

1058 gested for the purpose of showing that defendants' lines have got just as many problems with respect to switching operations as the New England lines. The New England lines have made a point of the fact that their lines are typical terminal lines, which involves yard switching, and for that reason witness shows in this exhibit that other lines have very large terminal operations, requiring a tremendous lot of yard switching.

Asked whether if he is going to assume from his footings that the trunk lines have more switching miles to transportation miles than the New England lines have, because the latter have only 17% and the former 22%, it is not fair to take into account the fact that the trunk lines' transportation miles involve a vastly higher number of ton miles and a very much greater proportionate revenue per locomotive mile, witness replied:

"You might draw such an inference from this statement."

Another thing which must qualify the result is that passenger switching miles are included, and presumably you have a greater pro-

portion of freight switching miles to total freight locomotive miles than you have passenger switching miles to total passenger.

Witness was unable to separate it, and worked up the statement along these lines, which seemed to him to indicate, when both columns are considered, in a general way, that the terminal facilities required by the roads west of the Hudson are just as important and extensive as those of the roads in New England.

Witness thinks the significance of Sheet 117 is that the greater investment of the lines west per mile of road probably had some significance in connection with the earning power of those roads; that they were capable of earning more. If the roads are better equipped, they will be able to earn greater returns.

1059 Witness thinks it is probably true that the book values of the New England lines as compared with the tentative studies submitted by the Bureau of Valuation are less than the tentative studies by a considerable amount. He does not believe that the tentative studies have been completed to such an extent that comparative returns can be made with respect to the trunk lines.

Witness will admit that the Erie is an exception to the general rule that high investment per mile of road suggests greater earning power. He will have to consider the Pittsburgh & Shawmut, and the Pittsburgh, Shawmut & Northern, as other exceptions.

Referred to his showing that the Jersey Central was in hard luck for ten months, & yet had a capitalization of $240,000 per mile of road, witness said that he is optimistic concerning the future of the Jersey Central. A low valuation per mile of road only in a general way suggests a tendency not to be a good earner. Witness will admit that these things cannot be fastened to particular lines and comparisons made between the Bangor & Aroostook and the Pennsylvania, for instance. The Staten Island Rapid Transit is another exception.

Referred to the capitalization of the Bangor & Aroostook which is only $49,000 per mile of road and the Pere Marquette which is only $58,000 per mile of road, and referred to a comparison between the Pennsylvania and the New York Central showing that the former has an investment of $50,000 more per mile of road than the latter and that the former shows a big deficit while the latter shows a substantial surplus, witness replied that he had noticed all these things, and still he thought it advisable to put in the exhibit for what it was worth, as indicating the general tendency.

Referred to Exhibit 118, and asked whether he had advanced the theory that, however sound the complainants' theory might be, if

1060 defendants got in the aggregate $24,000,000 in excess of 6 per cent, half of it would go to the United States, so that they would only have the other half to account for, the witness said:

"No; I said only in connection with the lines west of the Hudson, which theoretically are earning more than 6 per cent."

If defendants' lines pay $5,000,000 to New England, they lose it all, and if they earn $5,000,000 in excess of a 6 per cent return, they only lose half of it.

It is quite clear that if a road had a 6 per cent return and had, in excess of 6 per cent, $5,000,000, and through the operation of the special arbitraries or in some other way that $5,000,000 were turned over to the New England roads, defendants would just have a 6 per cent return and would give up nothing to the Government. If they did not give anything to the New England roads and had $5,000,000 in excess of a 6 per cent return, they would keep two and a half millionsand pay two and a half millionsto the United States Government. That is clear under the terms of the Transportation Act. So they would be two and a half million dollars better off than they would if they turned it over to the New England lines. Of course, this is based entirely on a theory. There isn't any such thing.

Witness was not Chairman of the Joint Accounting Committee of the Roads that made up the Eastern Rate Group, in the case
1061 that was presented to the Interstate Commerce Commission in Ex Parte 74. He was Chairman after that. There was a committee appointed and made a report purely for the purpose of informal discussion on the part of the Eastern Presidents' Conference with regard to this 1.48. Witness has not a copy of the report with him; but is willing to admit that Brigham Exhibit 6 is a copy of the report. Witness made it up in his own office, without any suggestion from Mr. Brigham, except that he wanted to increase the New Haven's earnings in some cases. Witness accepted that. They are in there. The figures are the ones which witness estimated and calculated himself. They are sheets 2, 3 and 4 of Brigham Exhibit 6. Witness made the distribution which resulted from the inclusion of the New England lines. Witness made a little typewritten report in addition. He has no copy with him, and is sure he has no copy among his papers in Washington. He did not carefully leave it home. He had no thought that that would be brought in, or he should have been very glad to have brought it along. Witness made a report submitting this tabulation showing how the 1.48 was distributed among the Trunk Line and C. F. A. roads, for the purposes of informal discussion. He showed on the basis of that theory that the net amount received by the trunk line roads was $16,275,982 and the net amount received by the C. F. A. lines was eight
1062 millions plus, and the total was twenty-four millions plus. Witness did at the same time think of this theory of the Pocohontas lines having carried that all off. He made some further exhibits which he has not attached to this Brigham Exhibit No. 6; first, a statement showing a group of lines without regard to their geographical location. Those are not the Allegheny lines, but another group, and then the Allegheny group. Nobody had thought of the Pocohontas group carrying off the $19,000,000 at that time. Witness does not know when that was first thought of. He thinks it was Mr. Williams' thought. Mr. Williams first suggested that a couple of months ago. Witness thinks it was some time after this petition was brought,—at least, that was the first time he heard of it. That was simply calling attention to something which was clearly shown on the face of the exhibit. Witness called attention in the

memorandum to what was shown on the face of the exhibit, that the New York Central Lines got $54,000,000.

Witness supposes that if they undertook to make an arrangement of these figures by shuffling them around & grouping them in different ways they might show that the roads in the aggregate were making $100,000,000, and they could pick out certain roads like the New York Central, the Lackawanna, and others, and show that they got $100,000,000, and they might pick out some west
1063 of the Hudson which lost.

It is absolutely not the fact that each one of the trunk line roads and each of the C. F. A. roads received 148 per cent more than they would have if the New England roads had not been included in the group. Asked whether column 8 in his own computation did not admit the fact which he had just denied, witness replied that he presumes he is entitled to the privilege of correcting a computation which was made last summer for an entirely different purpose,—simply for the purpose of informal discussion,—and which in its present form never would have been introduced by the defendant lines in this case as precise evidence. The 1.48 is not an accurate statement. Witness will not say it was intended to be. It was simply meant as a rough computation. They only had a day or two in which to make that. They did not have access to all of the figures. They hurriedly put together all the figures they could get. In doing that they left out quite a number of lines. They put in the principal lines and said, "We will make a picture which will be somewhere near right, for the purpose of informal discussion."

If the Eastern rate group consisted of all these roads included by the Commission, except the New England, it would not be right to say that the addition of the New England lines did increase
1064 the rate increase that was granted, if based upon the figures of the carriers, 1.48. Witness is willing to admit in his report that accompanied this sheet, that he said that the needs of the New England roads were 47.407 per cent. Witness admits that that is correct & that that was the figure shown in Brigham's Exhibit 6, and was shown in witness' original compilation. It showed that the needs of the C. F. A. lines, as a group, were approximately 24.431 per cent; and that the trunk line and C. F. A. lines combined, if put into one group, needed 27.981 per cent. Witness in that report included the so-called Pocohontas lines among those generally classed as trunk lines. So that for the purposes of informal discussion the needs of the roads west of the Hudson and the Eastern rate group were estimated to be 27.981 per cent. That is not an accurate compilation, and the figures witness now has are based on the figures which went before the Commission, and include all the roads in Eastern territory which were included in the compilation which went before the Commission. The combined figure of 27.981 is a combination of the 29.767 and 24.431 to the Trunk Line and C. F. A. lines. On the basis of an incorrect theory, by the inclusion of the New England lines, they raised that combined or average figure to 29.46 per cent, and the difference was 1.48. They actually got something

less than 40 per cent. The order granted 40 per cent on
1065 certain classes of traffic, and much less than that on certain other classes of traffic.

Witness has no objection, in principle, to a readjustment of divisions where they are not fair. He is not indisposed to consider a readjustment of divisions merely because it involves a good many readjustments. Witness has called attention to a good many results that appear to be unequal in this very sheet, but that might not have anything to do with the division of freight revenue. The lines making money and the lines not making money might not exchange a pound of freight. Here we have a condition where in many cases they do exchange a very large amount of freight. For instance, the Erie exchanges practically no freight with the C. & O. You could not ask the C. & O. to contribute to the Erie Railroad through the medium of divisions.

Witness does not think these obstacles can be easily overcome; but he has no objection to the principle, if it ought to be applied. That is not the only problem. If a road is in financial difficulties, the only way out is not through the means of adjusting its divisions and taking revenue away from other lines.

Adjourned to January 27, 1921, at 7 o'clock P. M.

1066

Washington, D. C.,
January 27, 1921—7 p. m.

CLAYTON E. HILDUM resumed the stand and testified further:

Cross-examination (continued):

Witness does not think it is a complete statement of the case, in view of the award of the Commission, to say whatever the amount was by which the inclusion of the New England group increased the percentages received by the rest of the eastern rate group, that increase accrued to all the roads in the eastern rate group, even though in cases it did not bring them enough to show a 6 per cent. return.

Witness is unwilling to agree that one part of the award can be taken out and considered separately from the total award of the Commission. It seems to him that is what is done when there is taken out this question of an increase in freight rates to bring about a 40 per cent., and ignore the other features of the award. Theoretically when you consider the inclusion of the New England roads, without regard to all the features of the award, it did increase the other roads, but when you consider it in toto, it did not. Considered in the aspect just suggested, the increase did accrue to all the roads in the group west of the Hudson River, even if in some cases it did not give
1067 them enough to pay 6 per cent. on their property investment, just the same as the inclusion of a road which did not get enough west of the river in many cases increased the New England per cent.

Referred to his Exhibit No. 120, Column 7, the witness said that the figures were arrived at by adding 1.48 per cent. to the amount

of the respective freight revenues of those roads named, before the increase. Those items are computed on the basis of the items in column 3 increased by 1.48 per cent. If one assumes 1.48 as the benefit conferred by the inclusion of the New England lines, those figures in column 7 show what accrued to each of those roads by the inclusion of the New England lines. Column 9 has no relation to that particularly. About 72 per cent. of the total revenue of the lines west of the Hudson River is from freight. They did not get an increase of 40 per cent. on this 72 per cent. from their revenue; but whatever the increase was, applied to this 72 per cent. Their increase was on a very much larger proportion of the revenue than that of the New England roads, and relatively gave them very much more money. As a group the New England roads needed more than the roads west of the Hudson to give them revenue enough to earn 6 per cent. on their invested capital, and the way the order in Ex Parte 74 worked, they got less.

1068 Witness' Exhibit No. 124 does not represent a selected list of roads. It is all of the roads that had been received up to Friday night, the figures for the last one coming in by telegraph. There are 29 lines there, and there are 44, excluding the New England lines, in the reports received from the carriers.

Witness' different exhibits relate to different groups of roads. Exhibit No. 124 was made up from special reports received from the carriers, and they could only include, of course, those that they received. Exhibit 124 is intended to show that that group of roads on a constructive year, based on October 31, 1919, would show a return on their property investment of 4.553. Witness has no figure which, by contrast, will show what the New England roads' return is. Mr. Brigham submitted his statements of the New England roads for that same constructive year. Witness has the statements from which he could compute the return. Witness cannot say whether it would be about one per cent. It would be substantially less than the lines west.

Witness' Exhibit 125 includes the Boston & Albany, which has a pretty low operating ratio. If he should compare the New England roads, which are complainants here, and omit the Albany, there would be a greater spread than there is shown by his figures here, of between 101.19 and 100.24. There would be a slightly dif-

1069 ferent spread. In most of witness' exhibits he showed the Boston & Albany with the New England lines because it was so shown in Brigham Exhibit No. 6, and presumably whatever adjustment is made will affect the Boston & Albany prorated with the other New England lines, regardless of the fact that it is not a complainant.

Referred to his Exhibit 126, and to the use of the figure against milk of 39.75, and asked why he used that figure, the witness said that it was because they desired to tie this exhibit up with the final presentation of this case to the Interstate Commerce Commission, and that was changed, and they could not therefore do it without showing that figure as it was presented to the Commission. The Commission did not grant in all cases what they asked for, but that is the way it

was presented to the Commission. The district asked for that, so that the total at the bottom shows 39.75. It has no material effect on the result, but they simply did it that way instead of showing 20 per cent., and then putting a note down showing why it did not tie up with the application to the Commission. Witness thinks that if the figures were made on the basis of 20 per cent. increase for milk instead of 39.75, it would make a difference in the columns which deal with the New England roads which would be negligible. In
1070 his first column it would reduce the figure $6,956,416 to something a little over $3,000,000. The percentage at the bottom would be changed, witness thinks, 19/100 of 1 per cent., which would make it 39.94 instead of 39.75. It would also make a difference in the figures in column 7, of about half, and the figure 38.55 would change about the same as the other.

Referred to his Exhibit No. 111, the witness said that in computing the ratio for those 10 months he did not have the details for each separate month before him. These were simply taken from the monthly reports to the Interstate Commerce Commission, which show the cumulative figures. They just had the October figures, and took the cumulative figures from those reports.

Referred to his Exhibit No. 112, the witness cannot say to what extent the totals at the bottom of the two divisions, which he contrasts, are affected, so far as the total for the trunk lines is concerned, by the inclusion of a great number of small roads which do not have any direct connection with the New England lines. The witness' attention was called to the figures shown in this exhibit representing receipts per ton for the New England lines and for certain of their connections, Baltimore & Ohio, the Big Four, the Erie, the Lehigh Valley, the Michigan Central, the New York Central, the Pennsylvania, East and West, and the Wabash, and to the fact that practically every one of the principal connections of the New England lines shows larger receipts per ton than the New England lines. He replied that that had a direct relation to the length of haul, most of the roads mentioned having very long hauls. Asked whether the average is not a good deal affected by including such roads, for instance, as the Perkiomen, he stated that that road is a part of the Reading and does not amount to much. They do not affect the total to a great extent, because this is not an average of averages. The Staten Island Rapid Transit does not handle much of any freight. Therefore it does not affect the result to any extent. The Montour road and the Monongahela are small roads and do not affect the total to any extent. These roads are included in witness' Exhibits 113 and 114.

1071 Referred to his exhibit 114 and to the fact that the *the* same roads to which attention had just been called as having large receipts per ton also in each case have very much longer hauls than the average of the trunk line haul, witness replied:

"That is the reason." In a good many cases the haul of the Michigan Central should be added to that of the New York Central and the East and West hauls of the Pennsylvania should be added

together. In the same way the Central New England and the New Haven should be added together.

Witness' Exhibit No. 115 is not a selected list. It is simply the roads that have an average haul of between 50 and 150 miles. Witness had no special reason for not going above 150, only it would run off the end of the sheet, and would not show anything of interest to either side.

The Baltimore & Ohio, the Lackawanna, the Erie, the Lehigh Valley, the New York Central, the Pennsylvania, and the Wabash, would have shown very much longer hauls than anything shown on Exhibit 115, and very much less revenue per ton mile.

Witness had a longer exhibit, but simply cut it off as a matter of brevity. There did not seem to be much use in putting in those different lines that had a revenue of only 5 and 6 mills, as compared with the others, where the haul was so much longer.

Witness' Exhibit 114 includes the Canadian Pacific lines in Maine. If he were comparing only the lines which are petitioners, he would not have obtained an average haul of 112.19 miles. It would have been somewhat less than that. These three exhibits were prepared long before they knew how they were going to treat this case at all, whether they were going to group the Canadian lines in New England with the others or not, and it has never been changed.

1072 While the inclusion of the Canadian Pacific pulls up the average mileage, it pulls down their revenue per ton and their revenue per ton mile quite substantially. Witness does not think Exhibit No. 117 would be seriously affected if he included in it all the roads that he has in 114. The same New England lines are included, and some of the smaller lines are left out, in 117.

Referred to Exhibit 116, witness said that he had not made any other studies with reference to terminal characteristics, operating costs, station costs or yard costs. He has nothing on that at all. He projeced a study of costs for the first nine months of 1920 and secured information from a considerable number of lines west of the Hudson River, but he secured nothing from the lines east of the Hudson River and was obliged to give it up.

Witness does not know whether it would be practicable to make a rate group of the roads shown in Exhibit 119. Witness selected these because they seemed to be in a group, just as geographical a group as the New England lines. He selected these lines because they were separated for operating purposes during Federal control and administered during Federal control as a group. It is no less artificial than the seven lines in New England with three other lines in New England left out.

Witness had nothing to do with the presentation of Ex Parte 74. His office prepared figures for it. No such exhibit as this was presented and no suggestion was made that these roads should be picked out and particularly favored or that they were going to particularly suffer.

Exhibit No. 119 is based upon the figure 1.48, simply as illustra-

tive. The figures were there, and they illustrate the point that witness desired to make.

Referred to Exhibit 123, the witness said he understands that efforts are being made to bring the various states into line that are still refusing to give the full increase. What other efforts are being made to make up any of the shortages that are shown there, he does not know. Where he has shown a failure to realize on passen-
1073 ger revenue, the shortage represents what they have not been able to get by reason of the interference of state authorities. Some of this has been ironed out. When these were ironed out this statement would necessarily be modified to some extent, but after they are all ironed out there will still be a balance under item 10 of something over $26,000,000. Witness cannot tell how much of that is of the 33⅓ per cent. with their southern connections. He has asked for that information, but has not it classified in that shape as yet. The carriers reported in this other exhibit the amounts that they were losing through the effect of the 33⅓ per cent and all other reasons that brought down the 40 per cent increase. Witness is speaking of Exhibit 122, the last column. The New England differentials, for instance, should appear there. It affects defendants' lines a good deal more than it does the New England lines. Witness means by the differential, the differential New England rates, where the rates to Boston and other points in New England, eastbound, are based on New York, and it did not increase them 40 per cent; just maintained the differential. That applied on traffic moving through C. F. A. and trunk line to New England.

The New England roads have not had the whole of that
1074 differential. The rate to Boston is prorated between the New England lines and the lines west on established per cents, just the same as it would be if it were a full rate.

Exhibit No. 123 is based on the ratio shown at the bottom of Exhibit 122, and 122 is made up from individual reports received from the carriers, in which they were asked to show what their losses were in detail, but not subdivided as between western and southern, southwestern, transcontinental, and so forth.

The figure of $43,000,000, which has been used from time to time as what defendant lines are not getting out of that southern business, is, as witness understands it, an estimate comparable with their estimate here of $51,000,000, and it is an estimate of all the losses they sustained through failure to secure 40 per cent flat increase in freight charges, from whatever cause.

On the basis of this constructive year, on Exhibit 123, item 10, defendant lines need only $51,000,000 to show 6 per cent on their property investment. Theoretically, $51,000,000 more would enable their entire properties to pay 6 per cent on their capital investment. Of course, it won't actually. That has to be compared with New England, which, on a capital investment of about 1/10, shows $25,000,000 or more short of 6 per cent.

1075 Referred to Exhibit 125, witness testified that the roads whose operating ratio is shown to be very high there were all

of them more or less affected by the outlaw strike. All the roads in this Eastern District were affected by that strike. Presumably, both in trunk line and New England territory, a good deal of that poor showing is doubtless due to that incident. Witness is not perfectly familiar with the operating situation over there, but he has heard the opinion expressed that they were quite seriously affected by it. They must have been, if they could not move cars in and around New York, over to the New England lines.

Referred to Exhibit No. 126, Column D, where he stated the needs of the New England roads before Ex Parte 74 as $58,089,081, and asked why it differs from Mr. Brigham's Exhibit No. 8, witness said that he does not know on what Mr. Brigham based his estimate. These are the figures that went into the rate case and which were before the Interstate Commerce Commission for consideration in Ex-Parte 74. Undoubtedly this has some connection with Item 5, where witness shows the New England net railway operating income as $10,682,926. It is a fact that in Mr. Brigham's Exhibit No. 6, he has considerably increased the net railway operating deficit of the New England lines by putting in figures that were not in the case that went to the Commission. Witness has before him
1076 a record of those differences. Witness reduced the property investment of the New Haven from $418,000,000 to $378,-000,000, but that $40,000,000 was not in Brigham Exhibit No. 6. That is the $40,000,000 investment which they do not have in the Grand Central Terminal in New York. When witness reduced it he made a corresponding reduction or debit on the other side, which would be taken out of revenue to pay for joint facilities. He does not remember exactly the figures he took out,—approximately $2,000,000, he believes.

When this committee made up the details which later became Brigham Exhibit No. 6, they sat down to discuss the preparation of this exhibit, and the representatives of the New England lines stated that those figures did not represent what they then knew to be the situation with respect to the New England lines, and they wanted to correct them. Since the figures were to be produced merely as informal evidence to go to the presidents, and they were not insistent upon getting down to a penny how much was involved, whether it was $25,000,000 or $23,000,000 or $21,000,000, the lines west agreed with the representatives of the New England lines that they might put those figures in. Manifestly, if they are going to consider this thing on an accurate basis, it would not be proper to correct
1077 the figures which actually went into the case, and were before the Commission when the advance was granted. That is the case in Brigham Exhibit No. 6. Those are not the figures that went before the Commission, and in witness' exhibit he has used the figures that actually went before the Commission.

Witness does not know why those figures in all cases were changed, but on six of the New England roads—all of the roads with the exception of the Rutland—the net railway operating income was adjusted because of things which had come to the attention of the

New England people after the case had been prepared for the Commission. Those figures were not submitted to the Commission. They did not come from the final report that went to the Commission. Defendants took the position then that if they were going to go ahead on that basis, each one of the carriers west of the Hudson River might reasonably adjust its figures, but they preferred to tie it up as nearly as they could to the report that went to the Commission, and they did not have time to get all of their people together and find out how much they wanted to adjust their income.

It seems to witness perfectly clear that in computing the benefit which the New England lines claim to have given to the lines west of the Hudson River, they must of necessity confine themselves to the figures which went before the Commission.

1078 Certainly no benefit was conferred in any other way except through the medium of those figures.

Confining it, for the moment, to the New Haven property investment, the figure that went to the Commission was $378,000,000, not $418,000,000. It might have been shown to the Commission, in a foot note, that they had an interest in the New York Central Terminal. That is the situation which exists on almost every road west of the Hudson River; an exactly similar situation; and if they all attempted to put those figures into their property investment, they would have chaos.

Asked whether it was not called to the attention of the commission that that item of $40,000,000 must either be considered on the side of capital or a substantial sum deducted from revenue on account of joint facilities, witness said that he does not believe that it was brought *brought* to the attention of the Commission, because they were treating the district as a whole, and they could not put it in both the New Haven property investment and in the New York Central.

Asked what justification he has for using $483,312,634 instead of $480,000,000 as additional revenue required by all roads west of the Hudson River to yield the 6 per cent., the witness said:

"These are just the figures that went before the Commission in Ex Parte 74. I do not know where Mr. Brigham got his figure."

Column D shows the aggregate of the seven New England

1079 roads exactly as they went before the Commission; Column G shows all the rest of the Eastern district exactly as it went before the Commission.

When they submitted the revenue needs of the Eastern rate group, the submitted figure represented $483,312,634 plus $58,089,081. That is the figure which appears in Column 1. Those are exactly the figures that went before the Commission.

Mr. Brigham has made an unwarranted division. He has corrected his figures after the case was closed.

Redirect examination:

Witness' Exhibit No. 126 is based upon figures that were submitted by the petitioning carriers to the Interstate Commerce Com-

mission in Ex Parte 74. Those petitioning carriers included the petitioners in this case; and the figures submitted were the figures which they had furnished. Those are the figures that witness has used. Afterwards in this informal discussion, and for the use of the presidents, there was this compilation made which was the subject matter of the report referred to in the cross-examination. At the time of that compilation the New England roads, in connection with that situation, and for that purpose, desired that some of the figures should be modified so as to increase the prospective anticipated
1080 deficits. The net change in the deficit for the New England lines was $2,177,867, reducing the deficit from $10,399,985 to $12,577,852. That additional expected deficit was distributed among the New England lines. The B. & A. deficit was increased by $200,205; the B. & M. by $1,157,646; the Central New England by $263,015; the Central Vermont by $366,292; the New Haven by $210,516; and the Maine Central was increased by $19,807.

These figures that have been presented in this case as Brigham Exhibit No. 6, constitute the informal statements so prepared, and not the figures which the New England roads, together with the others, have presented to the Commission. That showing was made in connection with the original petition; and prior to the action of the Commission on that petition a second application was filed with the Commission, asking for an increase of rates and fares, to take care of the wage award.

No corresponding study, either like that of the witness, or like Brigham Exhibit No. 6, was made in connection with the second application.

Witness' Exhibit No. 126 is a study of the complete effect of the Commission's decision, and so far as witness knows, the only one made in connection with those proceedings.

If, in Exhibit No. 126, the item of milk is corrected in
1081 the first column and in the column applying to the Eastern district, exclusive of the seven New England roads, it will increase each of them a very slight fraction of one per cent., and the difference between the two will remain as it is now, approximately 1.2 per cent. It would not be much nearer 1.48 than it was before. it might be 5/100 of one per cent. nearer.

It does not seem proper, in any event, to consider the statement on any other basis than this, because any benefit that was given to the lines west came through the medium of this presentation to the Commission, and the presentation to the Commission was on the basis of milk 39.75, not on the basis of milk 20 per cent.

The application submitted to the Commission in Ex Parte 74 included 144 carriers, and included Class II and Class III as well as Class I roads, and switching and terminal carriers. Brigham Exhibit No. 6 covered just the Class I carriers. There were 93 additional carriers with property investment of $213,219,505, and with freight revenues of $30,588,406, that do not appear in Brigham Exhibit No. 6. They are in witness' exhibit, because this shows the total for the district. The effect of the omission of those 93 carriers has been to pull down the 1.48 to a lower figure. There are three factors which

have brought about the reduction from 1.48 to 1.2. First,
1082 the correction of the net railway operating income in the Brigham exhibit to the actual figures which went into the case brings the per cent. from 1.48 down to 1.358; the change in the Boston & Albany makes a difference of 0.016 per cent; the exclusion of the 93 Class II, III and switching companies makes a difference of 0.142 per cent., or a total of 0.28 per cent., the difference between 1.48 and 1.2.

In witness' exhibit there was absolutely no effort to select figures. In most cases he has simply taken all of the figures that he could get. In the first exhibit, 111, he has only five New England roads. That is because for the 15 per cent. increase there were only those five represented. They could not go any farther. They had no investment figures for the other roads, and these are the principal ones, so they were satisfied to take what they could get. In Nos. 112, 113 and 114, the figures were taken from the Commission reports and as practically everything was available, they put everything in.

That Exhibit 116 seems to show a much shorter list of roads than Exhibit 113, is largely explained by the fact that on Exhibit 116 witness has shown system figures in some cases; as, for example, the Pennsylvania system; whereas, on Exhibit 113, he showed separately the five or six different roads forming the system. That was
1083 just the way the figures happened to be available. The witness put in all the figures for the trunk line group wherever he undertook to summarize the trunk line situation.

Witness is not the originator, but he is the discoverer of the Allegheny group. It just occurred to him when he began thinking about this case, that that group would present an interesting comparison or contrast in this proceeding. He never heard of the seven complainant New England roads as a group before this proceeding. The Allegheny region was invented or discovered because of the insistence of their New England friends that the New England lines constituted a distinct geographical group and that no group of lines that could not be classed in the same way had any right to be considered.

Referred to Exhibit 123, and the inference based on the constructive year that all the roads in the Eastern district needed was about $51,000,000, they have actually realized that they will fall short of earning 6 per cent., owing to the substantial falling off in traffic, substantially more than $51,000,000. There is no question about that. The lack of earning 6 per cent. will be many times the $51,000,000.

1084 Recross-examination:

The figure of 1.2 instead of 1.48 would make the amount that the trunk lines got by the inclusion of the New England roads $20,000,000, and something over.

Redirect examination:

With reference to the theory that defendant lines got the $20,000,000, witness did not mean that they actually got it. It goes

back to that constructive year theory; and in considering these things, the final decision of the Commission must be considered, as witness sees it. As a matter of fact, the comparison of the needs with the total revenue required is the essential thing. That means that they only assisted defendant lines theoretically to the extent of $13,000,000 and something, and when the final decision of the Commission took considerably more than that away from defendant lines, in effect, they did not benefit the defendants at all. Presumably the Commission, in making its decision, had in mind the fact that the lines over in this northeastern section of the country were in somewhat worse shape than the lines in the west and south, and therefore, in making their increase of 40 per cent, used the 33⅓, which effectually took away from the lines in Trunk Line and C. F. A. territory all of the benefit which theoretically accrued to
1085 them, because they were hooked up with the New England lines, and considerably more; so that, in final effect, they did not get anything from the New England lines. If there was a theoretical benefit, that is the item which has to be considered rather than the ratio of the deficiency of freight revenue. That is the ratio of the total deficiency to gross revenues, and it amounts to $13,488,748. That, however, was several times wiped out by the various other modifications that were made by the Commission in the final decision.

H. S. BRADLEY, called as a witness on behalf of the defendants, testified:

Direct examination:

That he has been engaged in railroad traffic work all his life, with various roads—the Big Four, Illinois Central, Wheeling & Lake Erie, Wabash, Wabash-Pittsburgh Terminal, and the Ann Arbor Railroad. He has been in railroad service about 25 years. He has been quite extensively in touch with the making of divisions during that time. He has actually participated in the making of divisions with various roads.

In connection with the preparation of the defense of this case, he undertook to supervise and direct an analysis of the divisions
1086 between lines in Central Freight Association territory and the New England lines complainants in this case. He was chairman of a committee that was working on that subject. He has examined the New England traffic exhibits, particularly those put in for the principal New England lines by Mr. Eaton and Mr. Wood. The exhibits that he has examined are fair, so far as they go. They are incomplete. None that he has seen purport to show tonnage. In them a paper rate occupies as much space as a rate that carries a large amount of tonnage.

As a practical railroad man, witness does not think these exhibits contain a basis or a starting point from which you could make a change in divisions if you were convinced that a change were desirable,

Asked whether he has any criticism of specific New England exhibits that he desires to offer, the witness said:

"Yes; I have. The first exhibits that I would like to criticize are those which I understand deal with a certain theory of this case. Those are known as Eaton Exhibit No. 43 and Wood Exhibit No. 52. There are other exhibits of the same purport, filed by other New England carriers, but I was unable to analyze those for lack of time. I understand, however, that they go to the same point, and contain the same theory. I believe the criticisms which run
1087 to the Eaton and Wood exhibits will also apply to them.

"I am now speaking of Eaton Exhibit No. 43 and Wood Exhibit No. 52. Those exhibits purport to make a comparison of the revenue derived by the New England lines on through traffic to the points shown with their local rates, and assumes for that purpose the Anderson scale. It is my understanding that the Anderson scale is not in full effect in the New England territory. As against this a similar showing is made for the combined earnings of the Trunk Line and Central Freight Association carriers as compared with their joint rates from injunctions with New England lines to the points in Central Freight Association territory shown in the exhibits. This does not give any consideration to the known fact that there are three well defined rate territories in Official Classification territory, namely, New England, Trunk Line and Central Freight Association, and in the case of the first and the latter that the Interstate Commerce Commission has established the levels of rates for class rate traffic.

"A correct picture can only be had by making a comparison for each group of carriers in these three well-defined territories, and the showing as made in these exhibits entirely fails to take this into account.

"The theory apparently advanced is that the earnings upon
1088 through traffic should bear some relation to the level of local rates. If this is to be a fundamental basis for arriving at divisions, it should be applied to all groups of carriers.

"The examples shown in the exhibit do not conform to the theory, because a comparison is made with unlike things. In the Eaton and Wood exhibits a short haul in New England territory is compared with long hauls for the lines west of the Hudson River. By so doing a comparison is made of the short part of a through haul and a corresponding local rate for a short haul on the one hand, with a long part of a through haul with a corresponding local rate for a long haul on the other hand. By this method the well known fact that in constructing rates the rate per ton mile decreases as the distance increases is entirely ignored. For this reason these exhibits are without value as indicating how the roads fare under existing divisions except only when hauls in New England are compared with like hauls in Central Freight Association.

"By combining the Trunk Line and Central Freight Association hauls the New York-Chicago subnormal scale of rates is used, including the depressed Albany westbound rate, which is based on 80 per cent of the New York rate.

"These exhibits also fail to be typical of the entire situa-
1089 tion, because of the small number of Central Freight Associa-
tion points used, amounting to five (5) points in the Eaton exhibits, and 10 points in the Wood exhibit, and they fail to set forth the short haul situation in the New England territory via the Rotterdam Junction or Harlem River routes. The Wood exhibit, with the exception of Grand Rapids, only shows the situation with respect to one route, namely, via Campbell Hall."

The two complainants' exhibits which witness is now criticizing purport to exhibit the relation between local rates in New England and divisions of through rates there, and local rates outside New England and divisions outside New England, except that they do not apply to local rates outside of New England, but a joint rate from the Hudson River to Chicago and St. Louis—not a local level.

Witness does not think it is a proper comparison under the theory used in these exhibits, as he understands them, to compare a division of a through rate inside New England with the New England short haul local rate, and set over against that comparison a comparison of a division outside New England with a combination rate from C. F. A. territory to the Hudson River. That is not a fair comparison because it assigns to the New England carriers a certain relation or
proportion of their local rates, but fails to extend to the other
1090 carriers the same privilege, and that is not a fair way of comparing divisions. If the New Haven road is entitled to have its divisions on through traffic fixed with regard to its local scale of rates, and that local scale of rates is higher than the joint scale, then the other carriers in well-defined rate groups, such as Central Freight Association territory, might well claim the same privilege or right. That is the weakness of the theory of this attempt to show that the New England divisions are unfair. It would not be fair to compare a 200-mile haul in New England, comparing the division of the through rate against the local rate, with a haul from the Hudson River to Chicago. A fair comparison with this 200-mile haul inside New England would be with like hauls in C. F. A. territory.

In view of the fact that they are both working under the scale fixed by the Interstate Commerce Commission, it would have been a fairer way to construct the exhibit to compare hauls in C. F. A. territory with hauls in New England territory, leaving trunk line out.

Even disregarding the theory of the exhibits, witness does not believe they embrace enough territory, either in New England or C. F. A. territory, to set before anyone a comprehensive view of the situation. To compare a division with the local rate on the line over
which the through rate is in effect *that is* divided, might be
1091 one method of determining whether a division is materially less than it should be, or, on the other hand, more than it should be; but it should take into account, at the beginning, the fundamental fact that the through rate on which the division is made does not contain the same elements that are contained in the local scale of rates used for comparative purposes. In other words, the principle, as witness understands it here, is practically a rate prorate.

Witness has made a detailed examination of Mr. Eaton's Exhibit No. 43, and has prepared an exhibit with relation to it.

The exhibit referred to was received in evidence and marked Defendants' Exhibit No. 128, Witness Bradley.

Asked to state of what his Exhibit No. 128 consists, the witness said:

"I believe the title page explains it pretty well. This is an analysis of complainants' Exhibit No. 43, to which we have added certain short haul points both in New England and C. F. A. territory, the new points added being Keene, N. H. and Worcester, Mass.; the C. F. A. points being Cleveland, O., and Youngstown, O."

Asked whether or not those points were added to remedy, in some small measure, the insufficient number of points in this Eaton
1092 exhibit, the witness said:

"They were not added to remedy an insufficiency in the Eaton exhibit, but rather to test out, in its true proportions the theory of the Eaton exhibit. In order to do that, the short haul points were added. It is rather difficult to make an analysis of this theory from the Hudson River into C. F. A. territory, because those hauls are long hauls when they get into C. F. A. territory. It is difficult to find corresponding short hauls in New England territory. The main purpose of this exhibit was to ascertain the fairness of the Central Freight Association divisions on New England traffic, measured by the theory of the Eaton exhibit, and for that purpose it was necessary to divide trunk line and C. F. A. territory, and to associate or contrast C. F. A. earnings on through traffic with the level of the C. F. A. lines' local rates."

In taking these rates in New England, witness showed both the actual local rates, and the Anderson scale. He compared the local rates in New England with the local rates in C. F. A. territory. The Eaton exhibit does not compare their actual local rates. It compares their rates as they were on the Anderson scale.

The witness continued:

"Following out the theory of this thing, we have separated
1093 and set up in two parts the earnings accruing to the New England carriers on through traffic, with the level of their local rates, using, in the latter instance, both their actual published local rates, and what they would be on the Anderson scale. As a companion, or comparison to that, similar calculations have been made to show the earnings accruing to C. F. A. carriers on the same through traffic, under existing divisions, and a comparison of them made with the level of the C. F. A. lines' local rates as fixed by the Commission, and since increased under the C. F. A. class rate case, I. & S., No. 965."

The Eaton exhibit compares the division in New England with the New England local rate, and sets over against that the division

in all of Official Classification territory outside New England, with the local or combination rate outside New England.

What witness does is first to set up the comparison of the division of the local rate inside New England with the New England local rate, and then compare that with a comparison that is made between the division in C. F. A. territory and the C. F. A. local rate. This shows first, that by combining the proportions and comparing such proportions with the local rates of the trunk lines and C. F. A. together, that it is unfair to the Central Freight Association
1094 lines. This analysis shows, almost without fail, that the proportion of local earned by the C. F. A. lines under existing divisions is materially less than the figures set forth in the Eaton and Wood exhibits, which represent the proportion earned by the lines west of the Hudson River as compared with the local rates west of the Hudson River into C. F. A. territory. On page 2 of Defendants' exhibit will be found an illustration of this, and it runs all the way through the 80 or 90 pages. Asked to give an illustration, the witness said:

"Yes, and I think we better explain just the basis of this exhibit and what these figures mean. On page 2 an analysis is made of the situation from Boston to Chicago westbound, via Rotterdam Junction, via Jersey City, and via Newport. In addition to showing the through mileages and the mileages of the New England and C. F. A. carriers separately, it shows the local rate of the New England line, the Anderson scale of the New England line, and the local rate of the C. F. A. line from the junction point where the traffic would be turned over to us.

"Now, in taking up the first column here, from Boston to Chicago, this is an illustration of the situation via Rotterdam Junction, New York Central, Buffalo, and New York Central lines west. The through rate from Boston to Chicago is $1.57½. The Anderson scale from Boston to Rotterdam Junction would be 86 cents.
1095 The actual published rate, for which I believe tariff authority was given on the first page, is 74 cents. The local rate from Buffalo to Chicago is $1.08½. Those factors all apply to the first class rate; and, underneath it, are separately shown the factors of the sixth class rate. Immediately following that, under the heading 'proportions (cents)', are shown the revenue which the New England line receives under current divisions from Boston to Rotterdam Junction, and the revenue received by the C. F. A. line from Buffalo to Chicago—that is, under present-day precentages. Following that, under the heading 'percentage relationship, proportions to class rate,' you will find three sets of calculations.

"The first represents the percentage that is earned by the New England line from Boston to Rotterdam Junction, of the Anderson scale, previously mentioned as 86 cents.

"The second calculation shows the percentage that they earn of their actual local rate, which is 74 cents.

"The third calculation shows two sets of figures, the top figure, 76.1, being the percentage that the New York Central from Buffalo

to Chicago earns of its local rate, shown above, which was $1.08½. Immediately below those figures—this occurs all the way through—
you will find a set of figures prefixed 'D'. They simply set
1096 forth, for ready comparison, the percentages of local rates which the Eaton exhibit sets forth as being earned by the combined lines west of the Hudson River, which would be the New York Central line east and the New York Central line west, from Rotterdam Junction to Chicago.

"All through this exhibit it shows that by separating the C. F. A. lines' earnings and comparing those earnings with their actual local rates, the percentage earned in each case is materially less than the figures set forth in the Eaton exhibit."

Referred to page 2, and asked to tell what the Eaton exhibit shows, as outlined on page 2, and then what his exhibit criticizing the Eaton exhibit shows, the witness said:

"The Eaton exhibit shows that the lines west of the Hudson River, in this example, earn 99.3 per cent. of their local rate; whereas a separate showing, separating the proportion west of the Hudson River, so that it represents only the earnings of the C. F. A. lines, indicates that they earn 76.1 per cent. of their local rate."

That means that the New England lines earn only 37.7 per cent. of their Anderson scale and 43 per cent. of the published rate. That does not mean just exactly what it appears to on its face.

The witness continued:

1097 "The theory, as set forth in the Eaton exhibit, indicates that New England lines earn relatively less on through traffic, as compared with their local rates, than do the lines west of the Hudson River. That can only be shown by comparing unlike things, as I mentioned in my opening criticism. I would like to show just how I arrive at that conclusion.

"Turn to page 24. This sets forth the situation from Portland, Maine, to Cincinnati, via the three routes I have previously mentioned. Here we have a case where we can compare a haul in New England with a like haul in C. F. A. territory. Under the head of Rotterdam Junction, it indicates that the haul of the New England lines is 281 miles. In the last column to the right, under the heading 'Newport' there is a 281 mile haul for the C. F. A. line, that representing the distance from Detroit to Cincinnati via the route indicated. In this case it shows that the New England line earns under the Anderson scale, 46.9 per cent., and under the actual local, 48.5 per cent., while the earnings of the line from Detroit to Cincinnati are but 39.1 per cent. That showing is in connection with the first class rate.

"In connection with the sixth class rate, the earnings of the New England line are 58.9 per cent. and of the line from Detroit to Cincinnati, 45.7 per cent.

"Turn to page 27. Here we have a comparison of a 251
1098 mile haul in New England and a 281-mile haul out in our territory. This illustration also applies to Cincinnati. It will be seen that the New England line earns, on first class, 53.7 per cent., and the line from Detroit to Cincinnati 39.1 per cent. I won't attempt to give you all the illustrations on this. There are perhaps 100 or more; but I will refer you to page 31 as another illustration. This deals with Cleveland, Ohio, and the point of origin there is Greenfield, Mass. We have a haul in C. F. A. territory there of 182 miles, which you will find under the Rotterdam Junction heading, with a haul of 185 miles in New England territory. The percentage earned by the New England carrier in that case is 56.2, and by the C. F. A. carrier 23.9. I have marked out here perhaps 25 similar examples. It runs all through it. You cannot get any other mathematical result than just that."

When there is an equal haul, or anything like an equal haul in C. F. A. territory, and in New England territory, the New England carrier gets the larger proportion of its local rate. This exhibit shows that. The other exhibits will show the reasons for it.

Going back to page 2, there are several different mileages via the different junctions. The first one is 209 New England and 540 C. F. A. The C. F. A. mileage is at least two and a half times as much. The New England earnings of Anderson scale are
1099 37.7; of the published rate, 43.8; C. F. A. earnings, 76.1. That is the first class illustration.

Generally speaking, it is true, and especially so in connection with certain routes selected, that wherever in Mr. Eaton's exhibit he compares a long haul in C. F. A. territory with a short haul in New England, that the C. F. A. road is getting a larger proportion of its local rate than the New England line. That is not true when you compare equal hauls in New England with the same length of hauls in C. F. A. territory. The result there is just the opposite. The percentage earned by the C. F. A. line is less than in New England. This comparison that is made, and criticized on page 2 of witness' exhibit, is an unfair comparison. That is, it is a comparison from which an unfair conclusion could be made. Witness' exhibit is merely a re-working of the Eaton exhibit with the addition of a few points. Witness does not claim that it is a comprehensive exhibition of the situation.

The witness continued:

"Now, just let me say a few words and give a few figures of an illustration of the results that can be obtained by comparing short hauls with long hauls; while if short hauls are compared with short hauls and long hauls are compared with long hauls, a different result is secured. I did not undertake to make an
1100 analysis of Hobbs' Exhibit No. 45; but, taking some figures out of there, an illustration from Chicago to Bangor, Maine, that exhibit is built on the same theory. Separating the proportion west of the Hudson River so as to show the earnings of the C. F. A. carrier and the local rate for the same haul, we obtain this result.

On first class, C. F. A. earnings are 45 per cent.; New England earnings, 55.7. Sixth class, C. F. A. earnings, are 50 per cent.; New England earnings, 68.4 per cent."

The mileages in that last comparison were C. F. A. 468; New England 466. The percentage was very much in favor of the New England lines. So out of Hobbs' Exhibit No. 45 witness took his example from Rumford, Maine, to Chicago, a distance in C. F. A. territory of 468 miles, and in New England of 415 miles. The percentage earned on first class by the C. F. A. line is 43.1; by the New England line, 56.3. On the sixth class, the percentage earned by the C. F. A. line is 50; by the New England line, 69 per cent.

The Eaton exhibit tended to show that the lines west of the Hudson River were obtaining a larger proportion of their local rates by their divisions than the lines east of the Hudson River; and that was the conclusion which anyone might draw from that exhibit.

That conclusion is not justified. It is not justified if you
1101 take from that exhibit these comparable hauls of equal length in C. F. A. and in New England territory.

From a comparison of the comparable hauls, witness concludes that mile for mile the New England lines earn more, as compared with their local scale, than do the C. F. A. lines. The mileages given are actual in all instances.

Witness has prepared a similar tabulation of Mr. Wood's Exhibit No. 52 to set forth the true situation.

The tabulation referred to was received in evidence and marked Defendants' Exhibit No. 129, Witness Bradley.

Witness has not added any points on this exhibit, but he has added two additional routes.

Asked to take up the consideration of his Exhibit No. 129, criticizing Mr. Wood's Exhibit No. 52, the witness said:

"As I started to say, one of the main criticisms of these two exhibits filed by Mr. Eaton and Mr. Wood, is that they use, in place of the actual local rates of the New England lines, the Anderson scale. We have undertaken to supply that deficiency in my exhibits Nos. 128 and 129.

"In Exhibit No. 129 we have added the route via Maybrook and the D. L. & W.; and via Jersey City and the Pennsylvania, because the Wood exhibit used the route only via Campbell Hall; except that to one point I believe an additional route was used. We did not feel as if the correct situation could be set forth for a road as
1102 important as the New Haven by only using one route, that route being a rather long haul route.

"Without taking up too much time, the same fault exists in Wood's exhibit as in the Eaton exhibit, in comparing short hauls in New England with long hauls in C. F. A.; whereas, if the comparison is made with hauls of similar distance, the picture looks quite different. I will refer you to page 13, from Boston to Cleveland.

"This is an example of a fair comparison. On this page, under

the heading Campbell Hall, will be found a C. F. A. distance of 214 miles, representing the distance from Salamanca to Cleveland. As against that, there will be found a haul in New England of 219 miles, representing the distance from Boston to Jersey City, almost identical in mileage. There we find, on the sixth class rate, that the C. F. A. line earns 33.2 per cent. of its local, whereas the New England line earns 57.3 per cent. of the local, that latter figure being the second figure from the right of the sheet under the heading of Jersey City.

"Additional examples will be found on pages 14, 15, 16, 17, 36 and 38. Let us see how this 38 shows up.

"This is from Hartford, Conn., to Youngstown. The example there is under Campbell Hall route, 139 miles in New England and 158 miles in C. F. A. On the fourth class, the New England line earns 50.7 per cent. of the Anderson scale, and 58.7 per cent. of its published rate; the C. F. A. line earns 28.6 per cent. of its published rate. Underneath, the letter 'D' indicates the figure that was set forth in the Wood exhibit. It is quite a different picture."

1103

Asked whether he had any other examples he could refer to in this exhibit of unfair comparisons, the witness said:

"Let us see what page 1 does. Under the Campbell Hall route, there is compared a 252 mile haul in New England with a 632 mile haul in C. F. A. territory. Via Maybrook, the New England haul is 248 miles, and the C. F. A. haul is 779. Via Jersey City, the New England haul is 219 miles, and the C. F. A. haul is 685. No true picture of the fairness or otherwise of a divisional basis can be obtained by comparing hauls that vary so greatly as those.

"Via Campbell Hall, it shows that the New England line earns 41 per cent. of the Anderson scale, and 50½ per cent. of its actual rate. The C. F. A. line earns 76 per cent. of its local rate. The Wood exhibit showed the latter figure to be 80.2."

On the line on which "D" is shown, the figure that follows "D," is almost invariably higher than the figure above it, under the caption "C," because the figure "D" was obtained by measuring a proportion of the through rate with the joint haul rate for the corresponding distance from the Hudson River to the destination point, thereby comparing a local rate with a long part of the through haul. When you reduce that, so that the thing that you compare with the New England division of the local rate is something that relates to Central Freight Association territory, you show a smaller percentage of the local rate than the Eaton exhibit shows. The closer the hauls become, the closer the per cent. is. So that when you reach a comparable haul in New England with the C. F. A. haul, the showing by percentages is turned exactly around.

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Asked whether that is always true on sixth class, the witness said:

"There is a variation in sixth class, due to the fact that the relation of the sixth class to the first, in the through rate from New

England to C. F. A. territory, is 33⅓. The relation in the C. F. A. scale is 28 per cent. You get some variation there, Mr. Examiner."

In some of these instances witness shows that the New England lines obtain a comparatively small percentage of their local rate, and that the same is true of the Central Freight Association lines. That does not mean that the intermediate carriers, the trunk lines,
1105 are obtaining a very large percentage of their local rate. If you take all the separate factors involved, the C. F. A. line, the Trunk Line, and the New England line, in the aggregate they bear no relation to the through rate on which division is made. No comparison or picture can be obtained as to the fairness of the division which compares that division with the local rate, unless the elements of the local rate enter into making up the through rate in the first place.

If the through rate were a full combination of three locals, one a C. F. A. local, one a trunk line local, and one a New England local, then it would necessarily follow that the fact that at both ends the carriers were realizing as divisions a small percentage of their local rates meant that the intermediate carrier was getting a large percentage of its local rates. That is not the situation at all. If you take the combination of locals in the three rate groups and put them together, the through rate would very largely exceed the through rates used in this exhibit.

Witness does not think it is practicable to assign divisions between these three groups of carriers on the basis of each division bearing a defined percentage relation to the local rate.

One of the principal reasons why that is not correct, even in theory, is that while the level of local rates is properly established in
1106 C. F. A. territory, and in New England territory, by the Interstate Commerce Commission, there is not any such well-grounded thing in relation to the trunk line local rates. They vary very greatly. That would be the principle of a rate pro rate, which is to make a percentage, using as a factor for ascertaining those percentages the various local rates. That is to say, if there was a local rate of 40 in New England, 40 in Trunk Line and 20 in C. F. A. territory, you would then have a percentage of 40 per cent. in New England, 40 per cent. in trunk line, and 20 per cent. in C. F. A. territory. To carry that to its logical conclusion would make the individual divisions separate and distinct from every point of origin to every destination, and that would vary with every rate used, whether that be first class or sixth class. There would be as many divisions as rates. That would be an impracticable method of dividing interline revenue.

Witness has examined Mr. Eaton's Exhibit No. 42 and Mr. Wood's Exhibit No. 55; and asked what they purport to show, the witness said:

"Those exhibits show the grouping and mileage used by the New England lines in the existing percentage or division system, showing mileages for certain—and I might say only a few—of C. F. A.

groups. It is a complete picture, as I understand it, of the
1107 grouping and mileage on the part of the New England lines, but falls far short of being a like complete picture representing the C. F. A. lines. For example, as representing the New York Central from Buffalo to Chicago, I think the Eaton exhibit shows but two points, Cleveland and Chicago. As representing the line of the Pennsylvania Railroad from Pittsburg to Chicago, the Wood exhibit only shows a Chicago group. That is a very incomplete picture from which anyone could attempt to judge the question of percentages between the New York Central line from Buffalo to Chicago and the Pennsylvania line from Pittsburg to Chicago. It ignores a very large amount of intermediate territory of great importance."

Mr. Eaton's Exhibit No. 42 and Mr. Wood's Exhibit No. 55 purport to give a picture of the mileages and groupings in New England territory, but not a like picture in C. F. A. territory.

Witness would think it would be necessary for a man who is attempting to understand the divisions as between New England and C. F. A. territories, to have before him a picture of both the New England mileages and groupings and of the C. F. A. mileages and groupings. These complainants' exhibits furnish the New England end of that very well, but are quite inadequate with respect to the
1108 C. F. A. In other words, they present in full one-half of the picture, and do not complete the other half, from which a comparison could be made.

Adjourned to Friday, January 28, 1921, at 10 o'clock A. M.

1109

Washington, D. C.,
Friday, January 28, 1921—10 a. m.

WILLIAM HENRY WILLIAMS, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is Chairman of the Special Committee of Presidents, organized to consider the matters in this case. He began railroading in 1890, as assistant to cashier in local freight office of the Pennsylvania & Hocking Valley, at Toledo. During all of 1891 and part of 1892, he was on the engineering corps of the Pittsburgh & Lake Erie, and in the fore part of 1892 he went with the Superintendent of Telegraph of the Pennsylvania, and in the fall of 1892 became attached to the General Manager's office of the Pennsylvania Lines west, and worked on various desks in that office until in 1896 he become secretary to the general manager. He was subsequently made secretary of the Association of Transportation Officers, the Special Committee on Blanks, which had charge of the introduction of economical methods, and along about 1900, became chief clerk to the vice-president in charge of operation. Around 1900 or 1901, he became

assistant secretary of the Baltimore & Ohio, assigned to special
1110 work, more particularly along economic lines. About a year later he was made assistant to the general manager, having in charge the station service, the make-up of fast freight trains, investigating yard operations, and various other special work which was assigned to him from time to time by the general manager. In the spring of 1904 he was made superintendent of freight transportation, yard and station service on the Frisco and Chicago & Eastern Illinois, having charge of the freight movement, the yards and stations, on about 6,000 miles of line. He left that company, owing to a change of management, in October of the same year. Early in 1905 he took up special work for the General Managers' Association of New York, and subsequently, in the same year, pursued the same lines for the General Managers' Association of Chicago, the work for the two associations going along together, making inquiries as to rates of pay in train yards, station service, shop service, telegraph operators, and maintenance of way men.

His recollection is that the study of the General Managers' Association of New York was limited to the men in engine and train service, but all the other branches were covered for the General Managers' Association of Chicago.

Then, in the spring of 1905, witness became Traffic Manager of the Merchants' & Manufacturers' Association of Pittsburgh, and subsequently, when that Association was merged with the
1111 Chamber of Commerce, he became traffic manager of the Chamber of Commerce of Pittsburgh. He continued to do that work as well as the work for the General Managers' Associations of New York and Chicago.

About May or June, 1907, witness was appointed assistant to the President of the Delaware & Hudson Company, and in October or November of that year he was elected vice-president of the Delaware & Hudson Company, in charge of the treasury and accounting departments.

Following that he was made a member of the Committee of 25, which at that time was making the recommendations and cooperating with the Interstate Commerce Commission in preparing the system of accounts which subsequently was adopted. That was the Committee of the Association of American Railway Accounting Officers.

Immediately after the organization of the Wabash Railway Company, witness was elected Chairman of the Board. For a brief period during Federal control, following the death of the President of that company, he was also president of the Wabash, until the property came back to the owners for operation.

His present position is chairman of the Board of the Wabash, and vice-president of the Delaware & Hudson Company.

Asked to describe, in his own way, the investigations
1112 which he has made bearing upon this case, and the results of those investigations, the witness said:

"I would say that I came into this case at the first informal conference in Washington—no. My first connection with the question at

all was as a member of the Eastern Presidents' Conference. That was prior to the matter being brought before the Interstate Commerce Commission. There there was more or less discussion on the subject, but in so far as this case was concerned, I first heard of it a day or two before the first informal hearing, when advice came to me at Chicago, and I attended the first informal conference here, immediately after which the Committee of Presidents was appointed, consisting of Messrs. Pearson, Hustis, McDonald, representing the New England lines, and Messrs. Rea, Smith, Truesdale, Underwood, Duncan, Alfred and myself, representing the lines outside New England, and subsequently Mr. Maher was added. Mr. Bird M. Robinson, President of the Short Line Association, was also elected a member of that Committee. At the time of its organization I was selected as Chairman of the Committee. As a result of that, I have, of course, been present at the various conferences which have been held, and by reason of my connection have found it necessary to make a study, to the extent I could, of the matters at issue. I have endeav-
1113 ored to analyze the testimony of the complainants, and more particularly along the question of the cost of operation.

"Taking the matter up in its entirety, the application of the New England lines, if granted, would result in a very substantial redistribution of whatever gross freight revenues may result to the Eastern rate group under the schedule provided for by the Interstate Commerce Commission in Ex Parte 74.

"Attempt is made to justify such a redistribution on grounds which may be summarized as follows:

"(1) It is assumed by the New England carriers that, although the Interstate Commerce Commission has exercised its discretion by forming a rate group consisting of what had been known for many years as Official Classification territory, it is still appropriate to separate that group into distinct districts for the purpose of considering whether one of them has obtained the full statutory return.

"Assuming that such a separation may be made, the New England lines assert that, if the territory in which they operate is considered as a distinct group, it will be found that they will receive approximately $25,000,000 annually less than the 6 per cent return on the value of their property, and that about $25,000,000 has been gained by all the other carriers in the rate group, considered
1114 as an aggregate, which would not have been gained if the New England railways had not been included with them in a single group.

"Aside from the legal question of whether the facts suggested by the foregoing, if they actually exist, would justify divisions intended to effect a redistribution of the gross freight rates, this application raises at least the following questions:

"(1) Whether the lines operating in New England territory, considered in combination, are in fact separated from the other carriers in the Eastern group by actual differences that justify treating them in such combination as a distinct group.

"(2) Whether the operating costs of the New England lines are so adversely affected by inadequacy of facilities or by methods still so susceptible of improvement that their gross operating revenues do not now yield proper operating income.

"(3) Whether the rate structure of the New England lines, including both passenger and freight rates, is such that they derive reasonable revenue from traffic local to New England and from the traffic which they interchange with lines other than those in the Eastern rate group.

"(4) Whether the lines constituting the balance of the Eastern rate group, considered in combination, but excluding the New England lines, will actually obtain $25,000,000 or any comparable sum more than the 6 per cent return to which they would have been entitled if placed in a separate rate group, and whether the New England lines will actually receive $25,000,000 less than they would had they been made a separate group.

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"(5) Whether the changes proposed in this proceeding would, considering the New England lines alone and irrespective of the injustice to their connections, divert revenue to the railways and in the proportions, if any, in which it is needed.

"The foregoing will be discussed in their order.

"First. Are the lines operating in New England territory, considered in combination, in fact separated from the other carriers in the Eastern group by actual differences that justify treating them in such combination as a distinct group?

"It is submitted that this proceeding does not require any inquiry as to whether conditions exist that might justify the exclusion of New England from the Eastern rate group and establishing that region as a separate group. If thus set up and treated independently, the railways of these six states would plainly be entitled to a rate schedule so adapted to any special conditions therein found, including their heavy proportion of passenger traffic, as to produce in its entirety the same rate of return upon their investment as the Commission allows on the aggregate investment of the carriers in each of the other rate groups.

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"The commission, however, exercising the discretion conferred by the Transportation Act of 1920, and with the complete acquiescence of the New England carriers, determined to unite that region with the Trunk Line and Central Freight Association territories, and it would be most unsuitable to attempt, here and now, to suggest considerations that cannot be assumed to have been overlooked.

"The present application does not, however, suggest a re-grouping of Eastern territory, but its whole basis is the assumption that the present grouping is to be continued, and on that assumption it seeks a redistribution of the income accruing and to accrue to the respective railways within the Eastern rate group; and it supports this effort by contending, in substance, that it is desirable and proper to erect sub-groups within the group lawfully created by the Commission and

alone recognized by the statute, and to look to and provide for the fiscal requirements of the sub-groups thus erected, even though in order to do so it is necessary to take, without compensation, from some or all of the remaining carriers in the Eastern rate group.

"Presumably, in providing for rates adapted to produce a statutory rate of return in respect of all the railway property in any
1117 group which the Commission, in its sound discretion, might erect, Congress must have recognized the mathematical fact that provision for such an average return would necessarily result in returns to some carriers above, and to others below, the statutory percentage.

"The Transportation Act of 1920 plainly contemplates leaving the individual railways in each group to obtain such results as they are able from the group rates, relying upon their respective advantages, or lack of them, in location, efficiency of management, design and organization. To do otherwise would confiscate the economies of some railways, and might place a premium upon the inefficiency of others.

"If such discriminations within groups are to be made, it would perhaps seem easier to obtain a measurably satisfactory return at the expense of other carriers, or by diverting shares of the revenue in which the Government may have a substantial interest, than to obtain equally satisfactory results by the development of economies. It would tend to discourage future expenditures of money to effect economies of operation should increased returns obtained by past expenditures for such purposes be diverted to less progressive lines.

"Moreover, there is nothing in the conditions peculiar to
1118 New England which would warrant the action proposed. These peculiar conditions are:

"(1) The very high proportion of passenger train mileage to total train mileage.

"(2) The high proportion of less than carload freight as compared with total freight tonnage.

"(3) The very substantial volume of traffic moving in and out of New England by water, owing to the concentration of population within a narrow area adjacent to tidewater.

"(4) The fact that the territory is contiguous on only the west to other portions of the Eastern rate group; and

"(5) The character of the products of its manufacturing establishments.

"In other respects, conditions in New England are closely paralleled elsewhere.

"Railways that are unable to earn a fair return under existing conditions can be found in any region. Only the three southernmost states of New England show the relatively high proportion of passenger traffic that exists there, and it is not evident that, with a proper adjustment of passenger rates, this situation would not have its compensations.

"In connection with the water situation as it affects the railways of New England, I have had taken off of the 1910 census returns a statement of the population in each of the New England States located within 25 and 50 miles of tide, the work being done for me
1119 by Marwick, Mitchell, Peet & Company, chartered accountants.

"Those were the latest figures available—at least, available to me in the time I had. I understand the present census has been completed, but I haven't got the official data. I shall, however, be glad, if the figures are available, to make a similar statement at this time.

"That statement I offer as an exhibit. It shows that in Connecticut 64.75 per cent. live within 25 miles of the coast line; 96.93 per cent. live within 50 miles. As a matter of fact, the 50-mile stretch pretty near takes in the state.

"In Rhode Island, 98.55 per cent live within the 25-mile distance, and all of them, of course, live within the 50-mile distance, as the state is no wider than that.

"In Massachusetts, 51.2 per cent. live within 25 miles of tide and 61.76 per cent. within 50 miles.

"In New Hampshire, 19.44 per cent. live within the 25-mile distance, and 57.15 per cent. within the 50-mile distance.

"In Maine, 53.75 per cent. live within the 25-mile distance, and 77.82 per cent. within the 50-mile distance.

"Or, taking all New England, 56.21 per cent. live within the 25-mile distance, and 73.04 per cent. live within the 50-mile
1120 distance."

A document was received in evidence at this point and marked Defendants' Exhibit No. 130, Witness Williams.

The witness continued:

"If especial difficulties exist in New England, it can scarcely be otherwise than that they relate to local, rather than to interchange, traffic. The railways of that region take or deliver the traffic interchanged with other lines in precisely the same condition that their connections deliver or take it. It is not transferred en route, but arrives at the destinations in the cars in which it was originally loaded.

"The only exception to that is l. c. l. traffic, which passes through transfer stations en route, moving in one direction or the other."

Witness means to say that if the loading in New England per car is lower than in Central Freight Association or Trunk Line territory, that fact does not affect the interchange traffic.

The witness continued:

"The commodities and classes, the aggregate tonnage, the types of cars, the number of loaded cars, the average load in the cars, etc., are identical.

"East and west of New England this interchange traffic
1121 must require equal track facilities and equal expenditures of the efforts of men and motive power per mile of road haul

and for yard service. Substantially equal station labor and station facilities must be necessary at the respective terminals.

"With these equivalent demands upon labor and materials, if the railways of New England are unable to operate upon equal terms with their connections, the difficulty must arise from insufficient local traffic or other local conditions, and not out of anything directly appertaining to the interchanged traffic.

"The results obtained in any two or more sections of a rate group result from their relative rate structures, as well as their relative operating costs.

"The New England lines have undertaken to prove that the operating costs in New England are greater than on the other railroads included in the Eastern rate group. They have shown estimates of a division of the costs as between passenger and freight service. Although they have shown separately the traffic local to particular roads, the traffic local to New England territory and that handled by two or more New England carriers, and also the traffic interchanged with Trunk Line and Canadian roads, they have not submitted any testimony as to their relative costs of handling these different
1122 classes of traffic. Nothing now in the record of this proceeding throws direct light upon the question whether the traffic local to particular lines and that exclusively interchanged among lines in New England territory is self-sustaining.

"I want also to raise some question as to the division of expenses between passenger and freight. The information is rather meager. They show the cost for certain selected items. Those are the items which can reasonably be distributed as between passenger and freight. The capacity of a railroad line is not measured by tons, not measured by passengers. The capacity of a line is measured in trains, and trains operated at varying speeds reduce the capacity of the line.

"That is why, in France, all the trains moved at a uniform rate of speed during the war, whether they were passenger or freight; and, therefore, when it comes to the fixed charges or the return on the capital, and when it comes to the maintenance and other items of that kind in connection with the main line, clearly, with two-thirds of the train mileage on the New Haven and considerably over 50 per cent. of the train mileage on the Boston & Maine being passenger train mileage, I should assume that the passenger train service as to those lines would be called upon to carry its proportion of
1123 the burden.

"Furthermore, strictly freight railroads do not maintain their track at quite the same standard as those with high speed passenger service.

"Now, as to the division of cost, there has been no testimony that I have seen separating the carload from the less carload, the number of tons of each which are handled, and it would be necessary to have that subdivided as between the traffic local to one road, the tonnage which is handled between two or more carriers within New England and the tonnage moving to and from the trunk lines.

"In subdividing the terminal cost, which, as I understand it, includes the station cost, they have worked it out on a ton-mile basis.

"It costs just as much to handle that ton of freight at a station, whether it moves one mile, 60 or 100. So there is no relation between ton mile cost and the station cost in the way in which it is used in this record.

"And, furthermore, there should be some analysis of the average length of haul, so as to show separately the average length of haul for traffic local to one road, the interline traffic handled within New England and the interline traffic which is interchanged with the Trunk Line and Canadian roads.

"Cunningham Exhibit No. 17 shows that the average
1124 length of haul for revenue freight on the Grand Trunk Railway in New England and the seven railroads operated by complainants during the year 1918, was 100.64 miles. According to the Interstate Commerce Commission's preliminary abstract for the year 1918, the average length of haul for all New England carriers was 103.44 miles.

"Mr. Cunningham shows an average distance hauled of 153.39 miles for certain Trunk Line and Central Freight Association roads, while the Commission's preliminary abstract shows an average of 144.23 miles for all of the roads in these territories.

"No attempt, however, has been made to compare the average length of railroads in New England with the railroads outside of New England, and presumably a road that is only 40 miles in length could not have an average distance hauled in excess of that distance; and when we consider the many lines which operate from New York to Chicago, we would naturally expect to find some slight difference in the average distance hauled.

"Cunningham Exhibit No. 17 shows, for the seven roads of the complainants, an aggregate revenue ton miles of 8,802,281,375, and an aggregate revenue tonnage of 87,501,565.

"Mr. Brigham testified that the tonnage figures include duplica-
tions, each ton being counted as a ton for each road by which
1125 it was handled.

"That is on pages 52 and 53 of the record.

"Excluding duplications, the tonnage was stated by him as 58,854,253 tons. Dividing this into the aggregate revenue ton mileage indicates that, were the seven complainant railroads to be consolidated into one system, the average length of haul of revenue freight would be approximately 163 miles."

Asked whether the length of haul just referred to would be affected by the concentration of population along the seaboard, the witness said:

"That depends somewhat on the way it moves. With the railways as constructed it might possibly reduce the average length of haul on that part of the New Haven within Connecticut. There would be part of it that would not be materially affected.

"When it comes, however, to Rhode Island, I should not say that it would have any material effect.

"When it comes to Massachusetts, they certainly are fortunate

in having the people at the easternmost end of the state. It gives them that large volume of traffic over the greater part of the line east of Mechanicville up to within 20 or 25 miles of Boston.

"I should say that they might reasonably expect to get the haul through to Ayer on the greater part of their traffic, and
1126 when it comes to Ayer then it begins to thin out."

Witness having his attention called to the fact that Cunningham Exhibit No. 18 relates to the average length of the New England lines as compared with the average length of the lines in Trunk Line and Central Freight Association territory, said:

"If there is such testimony, of course I would accept it."

Witness withdrew the statement that he knew of no testimony on the point indicated.

Asked whether he had concluded his comment on the length of haul, the witness continued:

"When it comes to Maine, it is purely a question of mathematics until you get over a certain distance, where the location of people along the coast tends to probably reduce the length of haul, as against being spread out over the State, as they are in most of the other states.

"Vermont and New Hampshire are sparsely settled, and I do not feel that as to those states—well, New Hampshire is 84 per cent within 25 miles of tide. That leaves very few people for the rest of the state. But the relative number of people there is not so great. Of course, it would change the distribution of traffic if the people were not all concentrated in that limited space.

"I should assume, as to the lighter traffic lines, like those
1127 operating north, in New Hampshire, Vermont and Maine, that it then becomes a question as to the character of traffic handled. To the extent that it is manufacturing, if it is centered all at one place, then it would have some effect; but if it is of an agricultural character, then it would not have, I assume, a very material effect.

"Now, going back to the 163-mile average distance haul, as the total tonnage reported by the seven lines aggregate 87,501,565 tons, and eliminating deductions reduces this total to 53,854,253 tons, it is evident that 33,647,312 tons represent duplications of tonnage by reason of a considerable volume of traffic being handled by at least two carriers; and therefore that the New England lines do have a substantial volume of interchange or overhead traffic. They have shown the interchange traffic there on the local New England business, but I do not recall seeing the figures as to the traffic coming from Trunk Lines which moves up in there; and the difference between the local interline tonnage and this figure, of 33,647,312, would indicate the traffic that apparently passes over one line to get to another. If station expenses in New England are greater than

on other lines included in the Eastern rate group, the fact cannot be properly attributed to interchange traffic.

"I have prepared a statement, from data contained in the
1128 Commission's preliminary abstract of statistics of common carriers for the year 1918, which shows that of 27,695,089 tons originating at the stations in New England located upon complainants' lines, 4,042,218 tons, or approximately 14 per cent, consisted of less than carload traffic. All carriers in the Eastern rate group other than the New England carriers originated an aggregate tonnage of 654,670,323 tons, of which 24,764,521 tons, or less than 4 per cent, consisted of less than carload traffic. I would like to offer that as an exhibit."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 131, Witness Williams.

The witness continued:

"Platform labor at stations is required for less than carload traffic only, and each consignment of less than carload traffic requires approximately the same clerical effort on the part of station auditing forces as that required for a carload shipment.

"I offer as an exhibit a statement showing road freight locomotive miles and train switching and yard switching locomotive miles, freight service, during the year 1918, based on data contained in the preliminary abstract of the Commission."

The paper referred to -as received in evidence and marked
1129 Defendants' Exhibit No. 132, Witness Williams.

The witness continued:

"From this Exhibit No. 132 it appears that the total freight train switching and yard freight switching mileage of the New England lines, excluding the Canadian Pacific and Grand Trunk, was 61.91 per cent. of the total road freight locomotive mileage for the year 1918; while on the roads having interchange with the New England lines it was 68.10 per cent., and on all roads in the Eastern group other than the New England lines, it was 71.60 per cent."

Asked to explain just what the point of his exhibit 132 is, the witness said:

"I am coming to the question of facilities and terminal cost. It may be you have a lack of facilities. I am also going into the question of mileage. The next two go together. So far as this particular statement is concerned, it does not indicate, from that standpoint, that your switching service, in proportion to your road freight service, is out of line with the other territories."

Asked why he combined train switching and yard switching, the witness said:

"It is purely a question for the operating man to determine which is the more economical, train switching or yard switching.
1130 If there is not sufficient switching service required at a station to necessitate the operation of an engine locally in switch

service, then that switching is performed by the road freight crews. That is why the separation is made as between train switching and yard freight switching. I combine them also in the total. That explains both. You must take them into consideration, because you may substitute one for the other.

"I offer, as an exhibit, a statement showing the miles of road operated during the year 1918, based on data contained in the preliminary abstract of the Commission for the year 1918."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 133, Witness Williams.

The witness continued:

"This Exhibit No. 133 indicates that the percentage of yard track and of sidings to miles of road of the New England lines, excluding the Grand Trunk and Canadian Pacific Railway, was 58.06 per cent., while, for all the roads in the Eastern group, other than New England, the percentage was 71.46, and for the roads having interchanges with the New England lines, the percentage was 88.93. I am going to take these three statements together.

"I offer as an exhibit a statement showing the average num-
1131 ber of manufacturing establishments per mile of road, taken from page 57, Volume 8, 1910 Census, or 13th Census of the United States."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 134, Witness Williams.

The witness continued:

"This Exhibit No. 134 shows that for each mile of road in New England there were 3.201 manufacturing establishments, while the average in the middle Atlantic States was 3.257. In the East north central states, it was 1.343, and in the States of Delaware and Maryland it was 3.161. These data do not suggest any significant difference between the distribution of industries in New England and in the balance of the Eastern rate group. The effect of the slight difference that appears cannot have been very great.

"I would call attention there to Exhibit No. 132, that while it shows the train switching on the New England lines, the train switching mileage on the New England lines is a little greater percentage of the road freight mileage than is the fact for the rest of the Eastern group; as to yard switching, theirs is only about 50 per cent. of the total, while the rest of the group is much in excess of that percentage of the total. So, it is by bringing those two together, the two items which cannot be considered separately, that we get the full relation, and a better basis of comparison.

1132 "It has been suggested by the complainant lines that they have a heavier expense in handling the traffic they receive from us, by reason of the necessity of distributing that over New England, which they claim makes the cost heavier than ours. They did not, however, give any consideration to all the things which go into the collection of this freight before we forward it to them. The

quantity of cars which they receive at each of the important junctions in a day clearly indicates that they are in the same position we were at our initial point, in so far as their ability to make up trains from the starting point is concerned, excepting that we have to go around to the different industries and collect that stuff to get it into our working yard and classify the freight before we can get the tonnage moving forward. It makes no difference when it comes to the junction point. All they have to do is to classify it, then, for their own lines, and they are in a position to make up full trains. When you come to look, however, westward, the situation is somewhat different. To a large extent your eastbound movement is carload traffic, and therefore you can deal pretty largely with just cars; but when you go westward and you go into the question of distribution, we have the proposition of distributing all over the United States,
and of course, so far as the defendants are concerned, or so
1133 far as those in the Eastern rate group are concerned, distributing over our territory and passing on to our connections beyond less than carload traffic in much greater proportion than any less than carload traffic we give to the New England lines. For example, take the less than carload freight coming to the Delaware & Hudson from the Boston & Maine. All of that traffic reaches us at Mechanicville. A very substantial part of that traffic must go to the transfer station at Mechanicsville for rehandling."

Asked whether the freight going to the transfer station at Mechanicsville for re-billing, goes in practically full carloads to Mechanicsville, the witness said:

"It would vary in volume, depending on the quantity of traffic moving from their various loading stations. Generally speaking, traffic moving to transfer stations has a greater average tonnage than the traffic moving on the final 50- or 100-mile run, where the distribution is ultimately made. After that traffic is handled at Mechanicsville, assume, for example, it is going to a point between Columbus and Indianapolis, on the Pennsylvania. As to how it is loaded, that is dependent upon the volume of tonnage at the time. You load it in a car for Wilkes Barre transfer, which is a junction
point between the Pennsylvania and the D. & H. Either Me-
1134 chanicsville or Wilkes Barre, as the case might be, would make a car for Pittsburgh transfer, unless there was sufficient volume of traffic to justify making a car for Columbus, Ohio. Handled at Pittsburgh transfer, they load it in a car for Columbus, and when it moves out of Columbus on a train headed towards Indianapolis, the traffic is then handled by the way freight crews; so that as against the distribution of carload traffic in New England, we have a very much more expensive job of distributing less than carload tonnage west of New England. Of course, to the extent that we receive carload traffic from New England, we have all the expenses of distributing that carload traffic."

The witness continued:

"As I said, in the statement with reference to the work of distribution, consideration must be given to the work of assembling and other work incidental to getting that traffic in trains. For example, you have the industries spread out over your line, and have to go around and pick up the car, just the same as the New England lines have industries or consignees distributed over their line and have to peddle them out. Now, it may be true that in the point of origin there will be a greater tonnage originating with one shipper than the volume of traffic handled by one consignee. But I have seen no comparison of the figures of that kind. But take, for ex-
1135 ample, a mine. The originating line has to furnish the cars, as a rule. The mines do not work Sundays, and they do not work holidays. Generally speaking, the consignees do not, so, to that extent, we are about even. But in the mines they have a different idea of holidays than usually the employes of the consignee. In the anthracite mines they celebrate every church holiday, practically and they celebrate the national holidays of practically all the countries represented by the employes at the mine. We have something over 32 dialects. They also have what are known as 'button strikes.' That is the means provided for collecting the dues. This is also true as to bituminous mines. If the dues are not paid, the men decline to go in the mine until the employe is wearing a union button. That means the mines close down at least for that day. Then, you must have the cars in sight for loading. The men will not go into the mine in the morning unless there are some cars there to be loaded, some railroad cars. In the bituminous mines they are even more strict than the anthracite. In many districts they take the position that there must be in sight sufficient cars to take care of a day's operation.

"Now, to meet those conditions and to overcome the effect of any delays to your road movement, especially in the handling of your empty cars, getting them back through the day, you have
1136 got to get your empties there in advance of what you might do for another producer of tonnage. Generally speaking, we figure on having from 100 to 200 cars in the district over and above what we might need. That is, we count on having on hand and in sight about 200 cars more than would be loaded, in order to reasonably insure the mines operating as against those adverse conditions."

Asked was that condition affected by the condemnation of coal loaded in cars, the witness said:

"As to bituminous coal, generally speaking, that is not affected. In the case of anthracite, it all must be inspected for market, because it is mechanically prepared, and from 12 to 18 per cent. of the cars will be condemned after they are loaded, condemned as to the quality of the coal. Some of those cars, on reinspection, may go forward; but a substantial part of them, a very substantial part of them, are placed back in the empty yard, and must pass through

the breaker again for rehandling. Practically none of the mines have sufficient track capacity to hold enough empties for a day's loading, and a loading yard to take care of a day's operation. In some places it is necessary to switch twice, and in some places three and four times.

"After you have gotten all these cars loaded, in a bituminous or anthracite mine, you have different sizes of coal. They
1137 are not quite as great in the bituminous as in the anthracite; and you have different customers for the different sizes. Then, you have customers located over a very great territory, and you are endeavoring to please each of them by helping them out a little, with the result that these cars are billed to various places and to all points of the compass, so that those cars must go into the working yard. All of those cars do not go just to one connection, and do not go a substantial distance. You will find that traffic starts going off within 10 miles, 20 miles, or 30 miles of its point of origin, so that you not only have to separate it by towns for movement over your own line, but you have to separate it for the various connections. But it necessitates that rehandling through the working yard, and when you start out of that classification yard, as I have said before, you are in no different position than the New England lines would be if at the point they receive the freight they classified that freight in the working yard so that they could make up their trains to move, just as we make up our trains to move over our line.

"When you get into other industries that do not produce the tonnage, quite possibly, in that volume, then, of course, you have a little different situation, but you do not have all these other
1138 things, possibly, that I spoke of. But you still have to pick it up. You have the collecting agency, and in one case you simply put in the empty and pull out the load, while down in New England they put in the load and they may pull out the empty. While you have the empty haul back to us of the coal car, we have the empty haul of that car back to the mines.

"Prof. Cunningham and Mr. Slater discussed at considerable length, in their testimony, the alleged adverse effect on the New England operations of the low average length of haul, and also of the numerous branch lines and the consequently large number of junction points, more particularly with reference to the Boston & Maine and the New York, New Haven & Hartford, which are said to be somewhat similar.

"I offer, as an exhibit, a statement of freight train and freight locomotive performance, mixed and special trains not included, for the 12 months of the calendar year 1919, compiled from monthly statistics of the United States Railroad Administration, Series O, S. 1-3."

The paper referred to was received in evidence and marked Defendants' Exhibit 135, Witness Williams.

The witness continued:

"This Exhibit No. 135 shows that the New England lines are able to utilize a higher proportion of the tractive power of their
1139 locomotives than other railways in the Eastern group. The per cent of the tonnage actually moved to the engine rating on the railroads in the several operating districts defined by the Director General, and which are embraced in the Eastern rate district, during each month of 1919, are as follows:

"January: New England, 66.4; Central district, 59.0; Ohio-Indiane, 60.1; Allegheny, 60.7; Pocohontas, 68.3.

"February: New England, 69.0; Central, 61.0; Ohio-Indiana, 63.2; Allegheny, 63.0; Pocohontas, 72.2.

"March: New England, 70.5; Central, 63.7; Ohio-Indiana, 66.1; Allegheny, 66.2; Pocohontas, 74.7.

"April: New England, 74.1; Central, 68.3; Ohio-Indiana, 67.0; Allegheny, 69.5; Pocohontas, 74.2.

"May: New England, 75.4; Central, 71.1; Ohio-Indiana, 67.6; Allegheny, 72.9; Pocohontas, 76.7.

"June: New England, 76.0; Central, 71.3; Ohio-Indiana, 69.2; Allegheny, 73.8; Pocohontas, 76.9.

"July: New England, 75.8; Central, 72.1; Ohio-Indiana, 69.1; Allegheny, 72.2; Pocohontas, 77.9.

"August: New England, 74.8; Central, 73.0; Ohio-Indiana, 70.1; Allegheny, 74.0; Pocohontas, 78.3.

"September: New England, 76.2; Central, 71.4; Ohio-Indiana, 70.7; Allegheny, 73.5; Pocohontas, 77.7.

"October: New England, 76.3; Central, 70.4; Ohio-Indi-
1140 ana, 69.3; Allegheny, 71.5; Pocohontas, 77.2.

"November: New England, 73.3; Central, 65.9; Ohio-Indiana, 64.8; Allegheny, 66.3; Pocohontas, 73.9.

"December: New England, 68.1; Central, 59.8; Ohio-Indiana, 60.4; Allegheny, 60.6; Pocohontas, 70.1.

"These percentages indicate that the loss of tonnage due to picking up and setting off cars between terminals, and all other causes adversely affecting the ability to move tonnage equal to the rated capacity of the locomotive was less in New England than the average of all the other lines in the Eastern rate group. The same reports of the Director General show that the differences between the gross ton miles per locomotive mile obtained in the months of most favorable weather conditions, and those in which such conditions are most unfavorable to operation, were smaller in New England than in the region west of the Hudson River.

"According to Cunningham's Exhibit No. 17, the Bangor & Aroostook Railroad had a higher average length of haul for revenue freight than any other of the eight carriers shown thereon, and approximately 24 per cent. greater than the average for the eight lines. Notwithstanding this, the Bangor & Aroostook Railroad obtained an average of only 41 miles per locomotive day, as against an average for the eight railroads of 48.7 miles. Although the conditions are said to be similar on the Boston & Maine and

1141 the New Haven, the former shows an average mileage per locomotive day of 54.5 miles, and the latter an average mileage of only 41.9 miles. The Central New England, which had an average haul of only 70.44 miles, or 70 per cent. of the average for the eight lines, had the third highest average miles per locomotive day, namely, 52 miles, which is 3.3 miles greater than the average for the eight New England lines. By examination of the exhibit, which does show the gross ton miles per train mile, and an analysis of that column month by month, it is possible to show the loss of tonnage in winter months as against the tonnage handled in the summer months in the various groups adopted by the Director General for the purpose of operation during the period of Federal control.

"There has been some discussion of the relative amount of traffic handled into New England by water: They also handle traffic out of New England by water. I have no figures on the outbound. I offer, as an exhibit, a statement showing the tonnage of anthracite and bituminous, and the total coal tonnage moving into New England separately by rail and water, for the years 1917 and 1916. I think we have a later statement than that, which I want to put in, which Mr. Pearson has furnished. We are trying to locate it."

The paper referred to was received in evidence and marked
1142 Defendants' Exhibit No. 136, Witness Williams.

The witness continued:

"This also shows the water tonnage, as separated as between tidewater and water, the tidewater tonnage being that part of the tonnage which reaches New England by water and moves back by rail. The water tonnage is not handled by the railroads.

"I offer, as an exhibit, a statement showing tidewater shipments of bituminous coal to New England for the calendar years 1915 to 1920, both inclusive, shown separately by months, the figures being taken from the United States Geological Survey reports, No. 152 and subsequent reports."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 137, Witness Williams.

The witness continued:

"I would like to locate that other statement later, and have it inserted at this place, because it has a relation to these same figures.

"This statement shows, for bituminous coal, the tonnage reaching New England by water:

"1915	11,960,000	tons.
"1916	12,686,000	"
"1917	11,798,000	"
"1918	15,268,000	"

1143

"1919	8,385,000	"
"1920	10,457,000	"

"Later on there will be an exhibit introduced which will show the coal production of the country, and it will indicate that 1918 was the year of maximum production, and that in 1919 there was a very, very heavy falling off as compared with 1918, while 1920 is the second highest in the history of the country. The figures are not materially out of line when giving consideration to the fluctuations in tonnage, and would indicate that possibly as to 1920 it was slightly below the average based on the total production, and assuming New England took as much coal as in other years. But I think the statement furnished by Mr. Pearson will show that a little bit more fully.

"Exhibit 136 showed that for 1917 the total coal forwarded to New England was 37,893,119 tons, of which 20,203,929 tons moved all rail, 4,929,907 tons reached New England by water and were then forwarded to destination by rail, and 12,759,283 tons reached New England by water and were not transshipped by rail. During the year 1916 the total reaching New England was 37,110,897 tons, of which 17,014,595 tons moved all rail, 5,941,142 tons reached New England by water and were transshipped by rail, and 14,155,160 tons reached New England by water and were not transshipped.

1144 "Although the New England lines may originate no coal tonnage, Exhibit 136 indicates that coal reaching New England by rail and water constitutes approximately 47 per cent. of the total freight tonnage—except that that does not give allowance for the other freight tonnage that might reach New England by water, and which I did not have.

"As to fuel costs, Prof. Cunningham's statement of fuel costs, Exhibit No. 29, shows as follows, on basis of average cost, first eight months of 1920; and this is an estimate of the tons of fuel consumed during the calendar year.

"I do not believe it is necessary to read into the record the actual tonnage that is shown on the exhibit, but it is shown separately for freight service and for passenger service, and then the total for the two classes of service; the aggregate cost is shown, and a comparison with the total for trunk and C. F. A. I do, however, want to call attention to the cost per ton.

"Bangor & Aroostook	$7.15
"Boston & Maine	7.19
"Central New England	6.58
"Central Vermont	6.85
"Grand Trunk in New England	7.92
"Maine Central	9.97
"New Haven	7.28

1145

"Rutland	5.14

"The statement indicates a total of 2,048,715 tons for freight service; 1,581,670 tons for passenger service; total for both classes of

service, 3,630,385 tons, at an aggregate cost of $26,759,725, or an average of $7.37.

"The total for trunk and C. F. A. lines was shown as 28,777,551 for freight service, 10,997,366 for passenger service; total for both classes of service, 39,774,917, at an aggregate cost of $150,746,935, or an average cost per ton of $3.79.

"In Brigham Exhibit No. 5 the aggregate freight charges paid the trunk lines on fuel coal for the above New England lines, excluding the Grand Trunk, on basis of 1919 consumption (1920 being said to be much greater) are shown as $8,591,915, and 40 per cent increase in said freight charges is shown as $3,824,634.

"Assuming that $8,591,915 represents the total freight charges, and deducting that amount from $26,184,195—that is, the total cost shown on the exhibit less the cost to the Grand Trunk, $575,530—leaves a net cost, exclusive of freight charges, of $17,592,280, or an average price of $4.95 per ton. The average cost per ton of fuel for trunk line and Central Freight Association lines is shown as $3.79,
but this cost of $3.79 per ton includes freight charges, so that
1146 the price exclusive of freight charges would not be in excess of
$3.50 per ton.

"I have to say that I have simply roughly estimated that amount, and feel that 29 cents is probably an understatement.

"In other words, the New England lines are paying not less than $1.45 per ton for coal (exclusive of freight charges) in excess of the price paid by other lines, if I understand their figures. The lines west of New England are expecting to save at least 50 cents per ton after April 1st next, so that the New England lines should effect a saving of about $2 per ton.

"Generally speaking, our fuel coal is covered by contract; otherwise we could effect a substantial part if not all of that saving at the present time. The coal year ends March 31st; the contracts are all made on that basis.

"The fuel tonnage covered by Cunningham Exhibit No. 29 does not include all the New England lines, nor does it include the fuel coal reaching New England by water. I would say in connection with my Exhibit 136 that I am inclined to feel that it does not include the Bangor & Aroostook and the Maine Central. I think it includes all other lines.

"In the statement of revenue needs of New England filed by counsel for complainants at the first informal hearing before the Commission, it is stated on page 3 that—
1147 " 'The increased cost of fuel of 1920 over 1919 has been $13,000,000.

" 'The increased cost of fuel of 1920 over 1916 has been $25,000,000.'

"Cunningham Exhibit No. 29 shows the fuel consumed during the calendar year 1919 was 3,630,385 tons, and the estimated cost for 1920 is $26,759,725. Deducting $25,000,000 therefrom would leave a cost of $1,759,725 to cover the price of coal at the mines, plus freight to New England on 3,630,385 tons, or for 1916 an average cost per ton for coal at the mines plus freight to New England of

only 48.48 cents. Presumably the tonnage and costs include coal for road freight and passenger train engines only, and the estimate submitted at the informal hearing of the increased cost does not include coal for switching service, mixed train service, shops, stations, and so forth. Data forwarded to me by the presidents of New England lines show a total fuel coal consumption on all New England lines in excess of 6,000,000 tons, which on basis of $2 per ton reduction in price f. o. b. mines would permit of an annual saving of approximately $12,000,000.

"The barge rates on bituminous coal moving from various Atlantic seaboard ports to Boston and Portland, according to data furnished me by Messrs. Garfield and Proctor, wholesale coal dealers, Boston, Mass., are as follows:

1148 "Rates to Boston one year ago—that is, November and December, 1919—from Perth Amboy, $2.00; Philadelphia, $2.50; Baltimore, $3.00; Hampton Roads, $2.50.

"Six months ago—June and July, 1920—from Perth Amboy, $2.25; Philadelphia, $2.75; Baltimore, $3.25; Hampton Roads, $2.75.

"The present rates, January 19, 1921, quoted were: Perth Amboy, $1.50 to $1.85; Philadelphia, $2.25; Baltimore, $2.50; Hampton Roads, $2.25.

"The rates to Portland were:

"From Perth Amboy, November and December, 1919, $2.15; June and July, 1920, $2.40; January 19, 1921, $2.00 to $2.10.

"Philadelphia, November and December, 1919, $2.75; June and July, 1920, $3.00; January 19, 1921, $2.40.

"Baltimore, November and December, 1919, $3.25; June and July, 1920, $3.50; January 19, 1921, $2.65.

"Hampton Roads, November and December, last year, $2.75; June and July, 1920, $3.00; January 19, 1921, $2.40.

"These rates indicate a substantial reduction since June and July, 1920.

"There has been placed in the record a statement which shows the barge rates in 1916 and 1917, as I remember the figures. Those indicate rates very substantially less than this. They do indicate that for the present the New England lines are paying more

1149 for water transportation than they did in those years. These figures, however, show a substantial reduction, and it is reasonable to expect that still further reductions may be secured. In fact, since securing this data I have been furnished, through the officials of the Chesapeake & Ohio, a statement of barge rates from Hampton Roads, showing, on tonnage other than Shipping Board vessels, a rate of $1.75 to Providence, $2.00 to Boston, and $2.25 to Portland.

"To the extent that reductions occur in the barge rates, of course reductions can be had in the cost of fuel to the New England lines, in so far as the traffic moves by water or in so far as the rates then become lower than the all-rail rates.

"Mr. Cunningham and Mr. Brigham claim that under the 40 per cent increase in freight rates the New England lines will pay

$3,824,634 additional freight revenue to trunk lines. Normally approximately 45 to 50 per cent of the fuel coal for the New England lines reaches New England by water. Therefore when figuring the increased cost of fuel on the basis of 40 per cent of freight charges, he has apparently added 40 per cent to the water rates, no part of which accrues to the trunk lines, or he has not given consideration to what the situation will be with the water rates more nearly normal.

1150 "They have also included the freight charges, presumably, paid New England lines for their proportion of the haul.

"In this connection it should be borne in mind that coal mines are not located on the lines of all the carriers in trunk line and Central Freight Association territory, and that many of these carriers buy coal at points which are not on their lines in order to procure it from mines nearer to the points of consumption, and they are obliged to pay freight charges on such purchases. In other words, even those that have mines located on their lines go off their lines to buy coal by reason of the very long haul and the cost to them if they had to haul it the distance, and take it then from the nearer mines.

"Over 60 per cent. of the fuel coal used by the anthracite carriers, other than the Pennsylvania and the Erie, which also have bituminous mines, is bituminous coal and must be purchased at mines on other railroads. Little if any of the coal is loaded on the engines at the point of production, so that all roads, whether in New England or outside of New England, must handle practically all their fuel from the points of origin to the places of consumption, and the cost of transporting this coal has necessarily increased with the increased cost of labor, material, and so forth. The average length of haul of company freight on lines in the eastern rate group, exclusive

1151 of the New England lines, in 1918 was 115 miles, while the distance such freight was carried by the New England lines was only 62 miles. Therefore, to the cost of fuel coal as shown in the reports there should be added the cost of handling the extra distance of 53 miles on the lines west of New England, and which cost necessarily has increased with our increased operating charges.

"To the extent that the lines in trunk line and Central Freight Association territories pay a smaller amount per ton for freight charges on coal, the difference is due to the natural advantages resulting from the proximity of their lines to the places at which coal is produced.

"The total production of bituminous coal in the United States during the calendar year 1920 was approximately 50,000,000 tons in excess of the average annual production of the preceding 5 years, and about 122,000,000 tons in excess of the average annual production of the 5-year period preceding the war.

"I offer as an exhibit a statement showing the bituminous coal production 1910 to 1920, showing also the total exported, and of that exported showing separately that exported to Canada.

"The total exported to Canada is included in the total ex-

1152 port tonnage.

"It also shows the average per year, 1910 to 1914, which I

term the 5 pre-war years, and the average for the 5 years 1915 to 1919, and separately the tonnage for the year 1920."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 138, Witness Williams.

The witness continued:

"I offer as an exhibit an extract from an article in the 'Coal Age' of December 23, 1920, on the bituminous coal price situation, showing the prices of spot steam coal, mine run basis, net tons f. o. b. the mines, for November, 1919, May, 1920, August 5, 1920, December 9, 1920, December 16, 1920, and December 23, 1920, and then, taken from subsequent issues of the same paper, the figures for December 30, 1920, January 6, January 13, and January 20, 1921, and which shows a very rapid fall in the price of coal. As you will note, I have been unable to get the printer to keep up with the reducing price. If I could get yesterday's coal issue we would have still later figures."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 139, Witness Williams.

The witness continued:

"Exhibit 139 shows very substantial reductions in the price of coal
f. o. b. the mines, and that the market is rapidly falling. In
1153 view of the overproduction during the year 1920, as indicated
by Exhibit 138, and the substantial reduction in industrial activity, it is reasonable to anticipate that the price of fuel f. o. b. the mines after April 1st next will not, in normal times, be in excess of $3 per ton based on present rates of wages and prices of material.

"I feel that $3 is an overstatement rather than an understatement of the price.

"I believe I stated in another case that the carriers west of New England will also be able to make material reductions in their prices of coal with the change in prices herein stated.

"It may be found that the disproportionate amount of passenger train service to freight train service in the New England states, and the volume of traffic moving by water to and from New England, and other local disabilities, are sufficient to create a situation in that territory which does not exist in the balance of the territory now embraced within the eastern rate group. This, however, is a condition for which the remaining lines in the eastern rate group are in no way responsible, and any losses sustained by the New England lines by reason thereof should not be transferred to the other lines within the group.

"Second. Are the operating costs of the New England lines
1154 so adversely affected by inadequacy of facilities or by methods
still susceptible of improvement that their gross operating revenues do not now yield proper operating income?

"Exhibits 133 and 134 indicate a likelihood that the New England lines have insufficient yard facilities for handling their traffic. The adverse effect of insufficient facilities was well set forth in the New Haven report for the year 1919, as illustrated by the following extract

from the remarks of the president of that company, contained therein:

" 'Increases in rates alone, except as they rehabilitate the company and enable it to acquire funds for enlargement as the volume of traffic demands and the opportunities of better and more economical operation present, will not fully solve the problem; it also depends at the present time on increasing transportation capacity.

" 'During 1916 and 1917 traffic exceeded capacity and was handled with difficulty. Except for the earlier portion of 1918 and the latter part of 1919, capacity for the reasons hereinbefore stated, was more nearly adequate. The result was the handling of the greater volume of traffic, not perfectly, but in a manner generally filling the demands. The operating results during the past 8 months have again indicated lack of capacity during periods of heavy passenger travel, of heavier freight movement, and of unfavorable weather.
1155 The road has been overtaxed accordingly.

" 'Industry in the territory served by the New Haven expanded largely during war time. 203 industrial tracks were extended or added during the past 2 years. Present indications are that this expansion will continue. The confidence of those financially interested after the armistice is shown by the completion during the past 8 months of 93 large additions to existing plants or of new construction on a large scale, smaller items not being included; of 116 additional similar items which are still under construction; and of information obtained throughout the territory which, although necessarily more or less problematical, indicates intention on part of those interested to proceed in the early future with construction plans for numerous additional extensions and improvements of the same general character.

" 'The New Haven system serves a territory with a population approximately 15,000,000, but in particular there are, roughly, 4,000,000, including many large cities, which are served almost exclusively without other means of transportation. Its mileage is approximately 1 per cent. of that of the United States Railroads. The gross revenues of the system about 2½ per cent., and the population exclusively served is roughly 3¾ per cent. Prosperity of this latter depends almost entirely on the sufficiency of New Haven service.
1156 " 'Inadequacy of capacity results in congestion, delays to trains, and necessitates much extra work and duplication of endeavor to accomplish the final results. Service under such conditions is unsatisfactory to the public and uneconomical to the railroad. The increased difficulty of operation cannot but be adversely felt by the officers and employes. The trend of operating results is in the wrong direction. With adequate capacity, service to the public improves. The more favorable working conditions customarily prevailing under normal operation become possible. The cost of transportation and of car hire can be brought more nearly to a minimum basis. Expenditures heretofore for increased capacity have been profitable and have also enabled a more effective use of the property as a whole. The return from some items is direct. Others indirectly contribute their portion toward capacity to eco-

nomically and properly handle a large business. If the operating ratio is again lowered to say 70 per cent. of the income, roughly 30 cents from each dollar increase in revenue becomes available for net income.'

"I would just say in that connection that of course that 70 per cent. must have referred to the situation existing before the increase in rates. Generally speaking, we estimate that the increase in rates will cause an increase of about 8 to 10 per cent. in the oper-
1157 ating ratio; so in speaking of 70 per cent. there I assume that, translated on the present-day proposition, that would be nearer 78 or 80 per cent. (Continuing):

" 'Summarizing the necessity for increasing capacity, your company must provide such transportation that the requirements of the many communities depending entirely upon it will be met, otherwise the prosperity of this territory, which is necessary for its own prosperity, will diminish. Satisfaction, support, and good will of the public will result from proper service. The improvement in working conditions will increase the effective results as well as the interest and loyalty of employes. All of these factors will operate toward the maximum net income. From whatever angle of view, the maintenance of the property in condition to normally meet the commercial demands is not only necessary, but promises in the end to be the most satisfactory and profitable.

" 'The estimated needs on a minimum basis for power and for increased capacity during the present year are:

40 heavy freight locomotives; 5 passenger electrics....	$3,500,000
Additions and improvements for increasing transportation capacity and securing economy in operation....	10,000,000
	$13,500,000

1158 " 'Of the above completion of the freight terminals at Cedar Hill and Providence are the most pressing.

" 'With the consolidation of the several roads into the New Haven system, their small yards formerly existing have been continued in use. Such operation divides and separates what should be the proper handling of freight trains and cars. Traffic has increased beyond the capacity of these terminals. Classification cannot be kept up. Trains and cars are delayed. The capacity of the road as a whole is restricted. The terminal at Cedar Hill when completed will enable the receipt of trains, however made up, and of cars, whatever their loading, from all directions, their proper classification and reloading, and then the forwarding in straight trains properly made up and cars properly loaded for destination to every important gateway and commercial center on the system. Such operation will unify, simplify and expedite the handling of freight. The Providence terminal will perform corresponding service with a similar benefit to the lines east. Large advantages will accrue from decrease in cost of train and terminal service and in car hire. Capacity of the system will be increased.

" 'Construction on both terminals was commenced in 1917. Work

in 1918 could not be undertaken until the season was well
1159 advanced because financial arrangements were not earlier possible. A similar condition, resumption of work being at a still later date, obtained in 1919. The delays while unavoidable have been most discouraging. The present investment in each project is large. Partial and but small use can be made as yet of either, and the larger advantages which will ultimately result from their completion, are not being obtained. The present necessities are such that every endeavor will be made to complete to the extent needed for the present volume of traffic during the coming season. The plans of both terminals not only provide for those portions now needed, but also for additions from time to time as traffic increases.'

"I should like to say that there has been much done to improve the capacity and operation of the New Haven under Mr. Pearson's management. I quite appreciate many of the difficulties which have confronted him during the war period, and also during the period after the war, what we call our reconstruction period. The adverse effects of the coal strike which disarranged transportation, and subsequently the adverse effects of the outlaw railroad strike, necessarily have brought about conditions other than normal, and my only point in bringing these matters out at this time is to indicate the thought in my mind that these unusual conditions ought
1160 not to control the decision of matters which are now under discussion, when, as indicated—admitted by their own people—those conditions are within their power to overcome. And as to the general conditions which confront all of us, we should expect that they will get their operations back to normal as soon as we are able to get ours back to normal. I have more in mind there the question of methods of operation—the improvement which can be had in that direction."

Asked what effect inadequacy of terminals has on the amount of per diem, the witness said:

"Mr. Pearson testified that it is his feeling that there is some. If you are not in a position to make the proper classification of your trains in the initial yard where you handle the freight, you are going to increase the amount of work in each of the intermediate yards between there and the final destination of the freight. Generally speaking, the economic location of your terminals is a hundred miles. That is the ideal location for freight terminals—a hundred miles apart—for slow freight; but sometimes you have topographic conditions which make that impossible. For instance, take the D. & H. Coming out of the coal territory that is congregated at Carbondale. Now, from there to Oneonta is considerably less than a hundred miles, and then from Oneonta across to
1161 Mechanicville is less than a hundred miles. Then you have a line coming from Binghamton across; that is the old Albany & Susquehanna; that goes to Albany, and you have numerous junction points in there.

"The result there is that we have a constructive mileage of about 15 or 16 per cent. It is abnormally high. A study has been made,

and we are looking forward to see if it is going to be physically possible to so arrange those terminals that we might reduce that constructive mileage.

"In speaking of constructive mileage, the agreements with the men obligate you to pay them so much per mile in engine and train service, and then with a minimum day. That is usually figured at a hundred miles; so that if you operate your crew only 85 miles you have a constructive mileage of 15 miles. You pay the same wage for the 85-mile service that otherwise you would pay for the 100; and those are conditions which confront every railroad. There is no railroad that has all of its terminals just a hundred miles apart. I have a situation confronting me out West that is a little on the other side. Under the old schedules before the passage of the Adamson law, and when your schedules were based on a 10-hour day, you could have your distance between terminals a little greater than a hundred miles, and in that case we were working to make the terminals nearer together than further apart. But the real effect
1162 of the thing is that you have got to pass it through that terminal every hundred miles unless you do the work in the first instance. When it comes to the next yard you have got to switch out, because there will be some branching off before you get to the next terminal a hundred miles away. Now, it is much cheaper to do it in that yard than it is to do it with train service; and the other thing is that if you escape the re-working through the classification yard you save that amount of time.

"I will illustrate later—I might say it now; I am coming to this question of per diem next.

"I have a statement which I will offer, consisting of two pages, which will be Exhibit 140. The larger one ought to be No. 1 and the other No. 2, because it is a summary—140, sheet 1, and 140, sheet 2."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 140, Witness Williams.

The witness continued:

"Exhibit 140, sheet 1, is a summary of operating statistics, New England lines, prepared from statistics compiled by the Bureau of Railway Economics, their No. O. S. Series B, and shows the situation by railroads for each of the first 9 months of 1920, being all the data available at the time that was prepared.

1163 "Exhibit 140, sheet 2, is a summary of the statistics for the same 9 months, prepared from the reports of the Bureau of Railway Economics, O. S. Series B No. 9 and O. S. Series 2-3 and 5 of the U. S. Railroad Administration, and shows the information for the Eastern district, taking the totals as they appeared on the statements referred to. Then deducting from that the New England district, which figures are also shown separately, gives me the balance of the Eastern district; and then the Director General had certain of the lines in the Pocohontas district—not all of them, but some of them—under a separate Federal manager and they were shown separately, and by adding those I get the total for the Eastern district. Then

I have shown the information below for each of the New England lines.

"I am introducing this in connection with the question of per diem particularly.

"The freight car miles per day on the New York, New Haven & Hartford for the first 9 months of 1920 averaged only 9.9 miles, as compared with 14.1 miles during the corresponding period of 1919. In no month of 1920 did the New Haven equal its best month's performance of 1919, and in only 3 months did it equal its poorest performance of 1919, that is, 12.5 miles in January, 1919.

"The tons per loaded car averaged 23.5 tons as against 23.2
1164 tons in 1919. The net ton miles aggregated 2,228,042,000 as compared with 2,396,168,000 during the corresponding period of 1919. With the improved loading per car and the reduction in net ton miles, the New Haven could have handled the business of 1920 in approximately 32,000 cars, if it had obtained a mileage equal to that of 1919. The average number of cars on the line was 46,486 in 1920 and 35,866 in 1919. Handling the traffic of 1920 with 32,000 cars would have effected a saving of about $14,000 per day in per diem charges for hire of freight cars, or about $5,000,000 per year.

"I offer as an exhibit a statement of embargoes either issued by the B. & M. against the Delaware & Hudson or issued by the Delaware & Hudson against the B. & M., in the years 1916, 1917, 1918, 1919, and 1920; and accompanying that—I assume that probably they should be separate exhibits; there are two that I have mislaid and I will have to locate—I offer as an exhibit a similar statement prepared by the Central Railroad of New Jersey in connection with the traffic routed via the Central Railroad of New Jersey, the New York, New Haven & Hartford, the Central New England Railway and the Lehigh & New England Railroad for the years 1916 to 1920 both inclusive; also a statement prepared by the Delaware, Lackawanna & Western of embargoes in effect against traffic for
1165 points in New England account embargoes placed by the New York, New Haven & Hartford and Central New England during the year 1920; also statement prepared by the Long Island Railroad Company of cars held for the New Haven Railroad in the year 1920 under rule 15, which covers reclaims for per diem—in other words, on account of the inability of the New Haven to take the cars; also a statement prepared by the Pennsylvania Railroad Company of embargoes placed by the Pennsylvania Lines East of Pittsburgh and Erie, also placed by the U. S. Railroad Administration (Allegheny Region and Eastern Region) affecting shipments moving to and from New England via Wilkes-Barre, Harlem River, Campbell Hall and Maybrook gateways during the period 1916 to 1920 inclusive; a statement prepared by the New York Central Railroad and the Boston & Albany covering embargoes placed against the Boston & Albany; statement covering embargoes placed by the New Haven or placed by the New York Central against the New Haven during the period January 1, 1919, to October 22, 1920, affecting business via the New York Central and Boston & Albany; and a

similar statement for the New York Central in connection with traffic moving via the Boston & Maine which was interchanged with it at Rotterdam Junction or Troy.

"I have coming down today similar statements which are
1166 set up in type and which the printer was unable to get out last night, from the Erie Railroad and the Lehigh Valley, which will complete the situation as to the more important roads connecting with the New England lines."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 141, Nos. 1, 2, 3, 4, 5 and 6, Witness Williams.

The witness continued:

"Taking the first of those, relating to the Delaware & Hudson it is an analysis of embargoes placed by the Boston & Maine Railroad against its connections, and embargoes placed by the Delaware & Hudson Company against the Boston & Maine and other lines, restricting traffic moving via the Boston & Maine.

"During 1920 there were 129 days during which the Delaware & Hudson had embargoes against traffic moving via the Boston & Maine, while there were 299 days on which the Boston & Maine had embargoes against its connections. Allowing for overlapping embargoes, it appears that there were 216 days on which restrictions were in effect against traffic moving via the Boston & Maine. The general manager of the Delaware & Hudson Company informs me that no record was kept of embargoes during the Federal control year of 1919. For the four years 1916, 1917, 1918 and 1920
1167 the Delaware & Hudson had embargoes against traffic moving via the Boston & Maine aggregating 976 days, while the Boston & Maine had embargoes against traffic from its connections aggregating 785 days. After allowing for overlapping embargoes it appears that there were 929 days during the 4 years, or 63.59 per cent of the total number of days in the period, on which restrictions were in effect against traffic moving via the Boston & Maine, an average of 232 days per year.

"This Exhibit 141, No. 1, shows the number of cars held during each day of each month and the places at which they were held on the Delaware & Hudson, also the number of cars held on the connections of the Delaware & Hudson. During the year 1920, for example, cars were held to the extent of the number of car days which I will state.

"January: Nothing.
"February: 20,131 on the D. & H., 19,622 on connections.
"March: 3,848 on the D. & H., nothing on connections.
"April: 15,985, D. & H.; nothing on connections.
"May: 61,159, D. & H.; 34,695 on connections.
"June: 18,836, D. & H.; 7,995 on connections.
"July: 26,427, D. & H.; 14,455 on connections.
"August: 19,832, D. & H.; 6,664 on connections

"September: 280, D. & H.; nothing on connections.
"October: 705, D. & H.; nothing on connections.
1168 "Total, 167,203 on the D. & H.; 88,431 on connections.

"The first summary I made comes on the first page there, and the other is on page 26; yes, sir. As you turn over the pages, 28, 29, and so forth, you will note it shows the yards on the Delaware & Hudson and the Delaware & Hudson connections in which cars were being held.

"The adverse effect upon these Western connections of these unfavorable traffic conditions should not be underestimated. For example, during the month of July—that is not a winter month—cars were held for the Boston & Maine in 12 yards on that division of the Delaware & Hudson Company on which Mechanicville, the point of interchange with the Boston & Maine, is located. In addition thereto, cars were held back on the Saratoga and Pennsylvania divisions, as well as the New York, Ontario & Western Railway, the Central Railroad Company of New Jersey, the Lehigh Valley, the Erie Railroad, and the Pennsylvania Railroad. The originating lines, in addition to furnishing the cars, were denied their use far beyond the time reasonably required for handling the traffic."

Recess until 2 o'clock P. M.

1169 WILLIAM HENRY WILLIAMS resumed.

Direct examination (continued):

The witness continued:

"I have found those three exhibits among our papers. They were here, but just misplaced momentarily.

"The first which I would like to offer is a statement showing tidewater and all-rail coal consumed by each of the New England roads for the years 1920, 1914, 1913 and 1912. The data was furnished by Mr. Brigham. I said this morning, 'Mr. Pearson.' I see that it is Mr. Brigham. That is for the seven complainant lines.

"I would suggest that that be Exhibit No. 137, sheet 2. It all relates to the general subject."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 137, Sheet 2, Witness Williams.

The witness continued:

"In the analysis of Exhibit 137 we showed an analysis of the tidewater tonnage, and this Exhibit 137, Sheet 2, indicates that there is a very substantial reduction, apparently, in the fuel coal that is received by water and would in a very large measure account for the fluctuating tonnage moving into New England by water, as shown on Exhibit 137, Sheet 1, that statement including both railroad and commercial coal.

"Then I have located the analysis of embargoes by the Erie Rail-

road Company, showing the restrictions in effect against traf-
1170 fic for points in New England routed via the Erie Railroad and the New York, New Haven & Hartford during the years 1916, 1917, 1918, 1919 and 1920, and the statement furnished by the Lehigh Valley Railroad Company of cars held for the New York, New Haven & Hartford Railroad during the years 1916 to 1920, both inclusive, on which reclaim was presented. This is a part of Exhibit 141.

"I offer as an exhibit what is called a tentative statement of cost of freight car ownership for per diem purposes, that indicating the results of a study made by the Railway Executives to whom the matter was referred, and it was used by them in recommending the per diem rate of $1 per car. That will be exhibit No. 142."

The matter referred to was received in evidence and marked Defendants' Exhibit No. 142, Witness Williams.

The witness continued:

"This Exhibit 142 shows, in connection with the adoption of the current per diem rate of $1 per car, the estimates of cost of owning cars, which led to its adoption.

"The estimate on the basis of new cars will be seen to be $1.54 per day. It is noteworthy that all New England lines, except Boston & Maine and Maine Central, voted for the present per diem rate; that information being furnished me by the General Secretary of the American Railway Association.

1171 "The computations on which it was based make no allowance for losses due to idleness of cars when the traffic movement is not sufficient for the employment of all freight car equipment.

"I should like to say, in connection with the suggestion about the relation of per diem to divisions of a rate, that the per diem charge is fixed primarily to recompense the owner of the car for his investment, for the repairs to his car and for depreciation. If you pay the owner of the car the rental for the car and then, with the other hand, you take that money away from him through a change in the division of the through rate, you leave him nothing for the use of his car."

Asked whether he meant to say that he thinks the per diem should not be considered as one of the expenses which should be taken into consideration in determining divisions, the witness said:

"Absolutely not. All that you do is to pay the owner of that car a rental, or a return on his investment figured at 6 per cent. You pay him simply a rental for his car and enough to take care of his repairs to and the depreciation of the car. If you take any of that back through a change in divisions, the owner of that car
1172 is not going to be paid for his investment, and he is not going to make any further investments of that kind.

"Now, this per diem rate, as will be noted, does not fully recompense the owner. If you go back over the records 1906 to date—

and we have reasonable records for that period—we find many years in which there were large surpluses of cars. There are large surplusages of cars today. The owners of those cars are finding the cars are finding the cars coming home on their lines. They are not earning any per diem; they are not earning anything in the way of rental. So that to the extent to which the per diem charge fails to take care of a condition of that kind the owner is the loser.

"Now, where the owner in a measure helps himself, or hopes to help himself, why he buys cars is that the rentals of freight cars average about $2,000 per year.

"In other words, take the total revenue of the Class 1 roads and add to that 30 per cent, assuming that is the average increase for the country on this rate advance, and that would give $1,926 per car as the average earnings per car, just on class one roads only. So, when you take into consideration all the cars, it would probably be in excess of that.

"That, however, does not make an allowance for the private car line car which, of course, would also be earning some revenue;
1173 and I should say that somewhere between $1,800 and $2,000 would be about what the average freight car earns.

"I did, when assistant to the General Manager of the Baltimore & Ohio, and afterwards, when Superintendent of Freight Transportation of the Frisco, work it out on the basis of various classes of equipment, and it showed that the box cars were the best earners of any of the classes of equipment per year, and next to that came the open-top, and the car that earned us least was the flat car. Back at that time, about 1903 and 1904, an open-top car earned us about $800 per year, and a closed car earned us about $1,200 per year. With the changes that have taken place since, I should say that $1,800, or in there some place, was a close enough approximation, at least, to illustrate the point.

"Now, I have illustrated with the Delaware & Hudson, that being the first statement that was prepared at my request. Then that was forwarded out, with the suggestion that the other people prepare it along somewhat the same lines, so as to simplify the analysis of these exhibits.

"When we come to analyze the other exhibits, we find pretty much the same situation. There is relatively little difference in the situation, for instance, at Mechanicsville, as indicated by the reports of the New York Central and those of the Delaware & Hudson;
1174 and to a large extent you find a similarity existing when you come to analyze the interchange points with the New Haven.

"Take, for example, the New York Central, and we find on the last day of March, or through the month of March, cars being held at 37 different points on the New York Central. Inasmuch as the exhibit shows the points and the number of cars at each place, I won't take the time to set them out in the record.

"Now, in connection with the New Haven situation, taking the Jersey Central as an illustration, in the 5 years 1916, to 1920, account of New Haven embargoes and Central New England embar-

goes, the total number of days cars were held was 1,232; account of the Jersey Central embargoes against those lines, the number of days cars were held was 142, and account of the Lehigh & New England embargoes, the number of days cars were held was 18. That made a total of 1,392 days; less account overlapping embargoes, 269 days, or a grand total of days restricted during the 5-year period of 1,123 days.

"These are days through the years on which the embargoes were in effect on part or all of the traffic.

"A statement of the character of the embargo in effect and the length of time it was in effect is set forth in detail through the exhibit. This shows a grand total of days restricted during the
1175 5-year period of 1,123 days, or on an average of 224 2/5 days per year.

"And in 1919 the low number shown there is explained on account of the fact that during the operations of the Director General reclaims were not made for per diem during a part of the time.

"I assume that those illustrations will be sufficient, as the other exhibits speak for themselves. As I said, that indicates the situation as to the different gateways.

"Now, during this period, according to Mr. Pearson's annual report, they had an abnormal situation growing out of the war. As to 1920, it is my recollection of a statement made to me by Mr. Pearson—or, rather, made to the Eastern Presidents by Mr. Pearson—that they were in pretty good shape until the outlaw railroad strike, made it impossible for the lines west of the river to take traffic from the New England lines. That caused some freight to back up there, and then, when the strike was over and the traffic began to move eastbound again, there was a congestion which unduly embarrassed them during the year; and I am only pointing out the fact that this must be an exceptional situation which has confronted them to produce these very extreme results, which we would not duplicate in other sections of the country.

1176 "Now, as stated, the average earnings per freight car or the per diem rate does not recompense the owners for these unnecessary delays. Furthermore, the large number of cars held by the Delaware & Hudson Company, the Central Railroad of New Jersey, the Erie and other western railroads connecting with the New York, New Haven & Hartford Railroad, Central of New England or the Boston & Maine in the various yards of these western connecting lines seriously embarrassed their operations and materially added to their operating costs. No allowance was made by the New Haven or the Boston & Maine for these heavy additional expenses which they forced upon their connecting carriers.

"It is particularly unfortunate that such serious delays as these should have occurred when there was imperative need for more cars to handle traffic that awaited shipment from many points in the United States.

'It is to be noted that the average number of miles traveled per freight car per day on the Boston & Maine was 16 miles during the 9 months of 1920, and on the Boston & Albany 26.6 miles.

"During the corresponding 9 months of 1919, the cars averaged 17.5 miles per day on the Boston & Maine and 31.9 miles per day on the Boston & Albany.

"In view of the fact that the average length of haul is
1177 approximately the same on these roads, it should be possible for the Boston & Maine more nearly to approximate the daily movement obtained by the Boston & Albany. An improvement of 10 miles per car per day by the former would effect a saving of approximately 14,000 cars per day, or $14,000 per day in per diem charges; an annual saving of over $5,000,000.

"An analysis of the exhibits will indicate that in most months in which the Boston & Maine had the maximum number of cars on the line it had lower average miles per car per day than in the months when a lesser number of cars were on the line, indicating that the reduction in mileage was due to too many cars on the line, rather than to an insufficient number of cars to make up trains at the various engine terminals.

"According to the annual reports of the Boston & Maine, that company owned 20,962 revenue freight cars as of December 31, 1919, and 26,341 cars as of December 31, 1911, a decrease of 5,379 cars.

"This reduction in the number of cars owned involves an annual charge of about $1,963,335 for per diem.

"I have already indicated that it is cheaper, on the average, for a road to pay per diem than to own the cars, if you take in the good years and bad years, and assuming that you can get
1178 enough of the other roads' cars to handle your traffic and with the large volume of traffic going into New England being in excess of the quantity moving westbound, they are always in position to handle their business and take care of their shippers with the cars of other companies, even though they fail to maintain their own equipment.

"Mr. Slater, in answer to inquiry, stated that the average number of cars on the New Haven and Central New England ranges from 40,000 to 45,000 per day, of which 11,500 to 13,000 are constantly being loaded or unloaded. He asserted that, in other words, approximately 30 per cent. of the total cars on the system are constantly on tracks where traffic originates or to which it is destined. He stated that nothing more clearly indicates the terminal nature of the railroads than the fact that at all times almost one car in three is in process of being loaded or unloaded. That is the record, pages 150 and 151.

"From these statements it appears that the cars are in the hands of shippers and consignees approximately 7.2 hours out of each 24. Assuming 6 per cent. of cars to be on repair tracks, 1.44 hours each 24 would be so occupied. This would leave 15.36 hours during which the cars would be in the hands of the transportation
1179 department for handling in yards and movement on the road.

"My exhibit 135, compiled from O. S. 1 and 3 reports of the Director-General, January to December, 1919, inclusive, shows that the average freight train speed on the New Haven was in excess

of 10 miles per hour. It would appear, therefore, that the freight cars on this line were engaged in road movement between terminals not over one hour out of each 24, although they were available for such movement during 15.36 hours out of each 24. Of course, during that 15.36 hours they also would have to handle them through their yards.

"By dividing the average number of miles per hour made by the trains west of New England into the average number of miles per day made by the cars, you get approximately the time that those cars were in motion between terminals west of New England. Of course, that would include the time on passing tracks or anything like that.

"It would indicate that they are in motion between terminals west of New England between 2½ and 3 hours.

"Such study as we have been able to make of the situation does not indicate that the fact that they have the cars in the hands of the shippers or consignees 30 per cent. of the time, as claimed by the New England lines, is materially different than the situation west of New England.

"If there is greater terminal delay in the actual loading
1180 and unloading of cars in the New England States than west of New England, the remedy would appear to be in a revision of demurrage rates, rather than in assessing other lines to offset losses due to the improper use of cars by the shippers of New England.

"Attention is called to the relatively light loading of the cars and trains on the New England lines. The average freight load per loaded car is only 22.28 tons, as compared with 30.47 tons for all other lines embraced in the Eastern rate group.

"There has been no evidence to indicate that the New England lines are securing the maximum practicable loading of their cars. The New England lines own 2,915 locomotives, with an aggregate tractive power of 81,019,675 pounds, as compared with 28,242 locomotives, with an aggregate tractive power of 977,287,998 pounds, owned by the other lines embraced in the Eastern rate group. In other words, the average tractive power of the motive power of the New England lines is approximately 27,000 pounds, while that of the other roads in the Eastern group averages about 34,600 pounds.

"Now, those figures are not altogether fairly comparable. At best, they could only be used as an aid to judgment, in that the statistical information at our disposal does not separate the average tractive power of locomotives in freight service, those in yard
1181 service and those in passenger service. The average tractive power of those in road freight service would be greater. The tractive power would have to be weighted to show its true comparison, but it only points out the likelihood that their engines can haul less.

"If you analyze the Director General's report showing the gross tonnage which their engines can haul and divide that by the percentage of the gross tonnage rating which they say they were able to obtain, it indicates that the hauling capacity of their locomotives

in New England was substantially less than the hauling capacity of the locomotives west of New England.

"The lighter loading of cars, whether attributable to the use of cars of smaller capacity or failure of the shippers properly to load the cars furnished, materially increases the percentage of dead weight to the paying load; and this, together with the lighter motive power, necessarily reduces the revenue tonnage per train and correspondingly increases the cost of operation.

"As an illustration of the effect of the average loading on the cost of operation, I would state that the present average capacity of the freight cars of the country is 41 tons. In 1918, they were loaded to 65.56 per cent. of capacity. In other words, they contained 26.88 tons.

1182 "In the pre-war period they were loaded to 54 per cent. of capacity, equated for the difference in carrying capacity of all cars in the country, which would be on the basis of 21.39 tons per car.

"A locomotive having a capacity of 4,000 adjusted tons on a 3 per cent. grade line would haul 65 cars containing 26.88 tons each, while it would haul 72 cars containing 21.39 tons each; but the aggregate tonnage contained in the 72 cars would be 207 tons less than the aggregate tonnage contained in the 65 cars. Therefore, if the cars be loaded with only 21.39 tons, it would require 13.5 per cent. more road freight engines, freight trains and freight crews and fuel, and 11 per cent. more cars. The additional trains and cars will require additional track.

"Third. Is the rate structure of the New England lines, including both passenger and freight rates, such that they derive reasonable revenue from traffic local to New England and from that interchanged with carriers other than those in the Eastern rate group?

"Attention is called to a statement made by a former member of the Interstate Commerce Commission in an address on November 29, 1920, which is of historical value in considering the rate structure of the New England lines. He said:

1183 " 'There has been no adequate and intelligent study of our New England freight rate structure for a generation. It is a haphazard congeries of accidents, guesswork and traditions. We who have had official responsibilities have been utterly unable to induce the railway executives to give it proper attention. About 7 years ago, when Mr. Prouty was on the Commission and I was on the Massachusetts Commission, we raised rates and told the New England executives that they ought to make a careful study of their rate structure. They did not do so. Three years ago, as an Interstate Commerce Commissioner, I heard another case, and again we raised rates in New England, and again besought the railroad men to make a careful study of their freight rate structure. It was then clear that no one knew what ought to be known for an intelligent dealing with that difficult and intricate problem. This advice was practically disregarded, at least until very recently. The responsibility resting upon the New England executives for their

non-attention, or at any rate, belated attention, to this fundamentally important matter is very heavy.'

"I offer as an exhibit a statement prepared from the data contained in the 13th Census, 1910, of the United States, Volume 8, page 57, which shows the population in various states and in various groups."

The statement referred to was received in evidence and
1184 marked Defendants' Exhibit No. 143, Witness Williams.

The witness continued:

"That does show what you were asking, Mr. Examiner, and the land area, the population per square mile, and, as to manufacuring establishments, the number of industries reported, number of establishments, wage earners (average number), the value of products, the value added by manufacture, and then, per capita of total population, the value of products, the value added by manufacture, and the ratio of average number of wage earners to the total population, in per cent.

"From this statement it appears: As to the New England States:

"Value of products	$2,670,065,114
"Value added by manufacture	1,193,768,236

"For New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, Delaware, Maryland, District of Columbia, Virginia and West Virginia, being approximately the balance of the Eastern rate group:

"Value of products	$12,538,699,217
"Value added by manufacture	5,232,392,161

"It is my understanding that the larger figure contains the smaller.

"For the constructive year ended October 31, 1919, Ex
1185 Parte 74, the freight and switching revenues were shown as follows:

"New England carriers, freight and switching revenue $140,568,424 being 5.26 per cent. of the value of the products; all other carriers in the Eastern district, $1,679,281,825, being 13.39 per cent. of value of products.

"In New England States the value of products per capita of population was $408, and the value added by manufacture, per capita, was $182; each being greater than the respective averages for any of the other groups and nearly twice the average for the United States.

"From this it would appear that the probabilities are that the value of the products produced by the various manufacturing establishments in New England per ton of traffic produced is greater than the value of the products produced west of New England. I do not regard this statement as conclusive. I only offer it for what it may be worth.

"There have been numerous meetings, and certain changes in

rates have been agreed upon by representatives of the New England lines and the lines west of New England, which changes ought to be made in order to bring the New England rates affected more in line with the general rate schedule. Numerous other changes in New England tariffs have been suggested by the traffic
1186 representatives of the trunk lines, which as yet have not been accepted by the New England lines. It appears that there is opportunity for the New England lines materially to benefit themselves by revisions of rates in their own territory.

"Other witnesses will go into this subject more in detail, that being a traffic matter.

"Fourth. Are the lines constituting the balance of the Eastern rate group, considered in combination, but excluding the New England lines, obtaining $25,000,000 or any comparable sum more than the 6 per cent. return intended by the Commission? Are they so situated that $25,000,000 annually could reasonably be taken from them, and are the New England lines actually receiving about $25,000,000 less than they would, had they been made a separate group?

"Mr. Brigham's Exhibit No. 14 shows an estimate of 34,099,720 tons of freight interchanged by New England lines with Canadian lines and trunk lines; the total freight revenue therefrom amounting to $191,505,655, divided as follows:

"Through revenue:

"New England lines, $67,272,648, or 35.1 per cent.

"Trunk Lines, $68,485,946, or 35.7 per cent.

"Central Freight Association lines, $18,319,857, or 9.6
1187 per cent.

"Lines outside Eastern Rate Group, including Canadian lines, $37,427,204, or 19.6 per cent.; the total being $191,505,655.

"The statement furnished by Mr. Brigham to the Joint Accounting Committee showing tonnage interchanged and revenue thereon for a constructive year, and based on an analysis of revenue for 6 alternate months, September, 1918, to October, 1919, inclusive, shows that the Canadian lines handled approximately 10.3 per cent. of all traffic interchanged by the New England lines with their connections and that the Canadian lines and their connections received about 131.5 per cent of all revenue therefrom accruing to the lines outside of New England.

"Therefore, the $37,427,204 shown above would divide $25,873,263 revenue to Canadian roads and their connections; $11,553,941 revenue to American roads.

"The following statement of freight traffic moved to and from New England points, separated by territories of origin and desination, is taken from Brigham's Exhibit No. 14:

1188

Territories received and forwarded combined.		Percentage of total tonnage.
Trunk Line	20,748,132	61
Central Freight Association	9,262,437	27
Western	1,255,253	3.7
Canadian	1,028,381	3
Southern	930,478	2.8
Transcontinental	875,039	2.5
Total received and forwarded	34,099,720	or 100.

"The figures are based on actual movement for month of October, 1919, equated to yearly totals. That is a little different from the totals previously read.

"The New England lines are asking that they be given $25,000,000 annually in excess of the amount to which they are entitled on the basis of the existing divisions; this amount to be diverted to them by the application of tonnage arbitraries. Were 40 per cent. to be added to the freight revenue and the $25,000,000 prorated on the basis of tonnage percentages shown in Brigham Exhibit No. 14, the total revenue accruing to the carriers in each group as shown in Exhibit No. 14 would be changed to the following:

1189

Roads.	Revenue.	Total revenue if increase asked is applied.	Per cent total revenue.
New England lines	$94,181,707	.....	.....
Plus $25,000,000 equals	.....	$119,181,707	44.45
Per Cent of present basis	.....	126.54	.....
Trunk lines	95,881,324	.....	.....
Minus 61% of $25,000,000, or $15,250,000, equals	.....	80,631,324	30.07
Per cent of present basis	.....	84.09	.....
Central Freight Association lines	25,647,800	.....	.....
Minus 27% of $25,000,000, or $6,750,000, equals	.....	18,897,800	7.05
Per cent of present basis	.....	73.68	.....
All other rate groups (including Canadian lines)	52,398,086	.....	.....
Minus 12% of $25,000,000, or $3,000,000 equals	.....	49,398,086	18.43
Per cent of present basis	.....	94.27	.....
Total	$268,108,917	$25,000,000 $268,108,917	100.

"However, the New England lines claim that it is the carriers in Trunk Line and Central Freight Association territories which have received $25,000,000 more than the amount that would accrue to them at the rate of 6 per cent., and should this $25,000,000

1190 be deducted from their revenues from interchange traffic, the revenue figures in Mr. Brigham's Exhibit No.14, plus 40 per cent. increase, would be modified to the following:

"New England lines: $94,181,707, plus $25,000,000; revenue as revised, $119,181,707, or 44.45 per cent. of total revenue and 126.54 per cent. of the present basis.

"Trunk Lines: $95,881,324, minus $17,285,000; revenue as revised, $78,596,324, being 29.32 per cent. of the total revenue and only 81.98 per cent. of the present basis.

"Central Freight Association lines: $25,647,800, minus $7,715,000; making the revenue as revised $17,932,800, or 6.69 per cent. of the total revenue, being 69.90 per cent. of present basis.

"All other rate groups, including Canadian lines, $52,398,086. No change in the revenue; so that the revenue as revised would be the same for that column and the per cent. of total revenue 19.54, and the totals of the columns would be the same as in the other statement.

"Inasmuch as the tonnage and revenue shown for lines outside of the New England group embrace traffic moving to all points in the United States, the service performed, as measured by the average length of haul or in any other way, must necessarily be greater than that of the New England lines, so that when consideration be
1191 given to that factor, the disproportionate results of allowing the trunk lines only $78,596,324, as against $119,181,707 to the New England lines, would be much greater than indicated by the comparison of the revenues. That is the same traffic in so far as the trunk lines—No; that would also include the traffic moving via the Canadian lines. We were unable, from the figures, to make a complete separation just as to the traffic moving through the Central Trunk Line territory. The figures as shown here are, as I understand, the figures presented by Mr. Brigham in his Exhibit No. 6. All the traffic going into Trunk Line territory shown in that table would represent the direct interchange. The Central Freight Association traffic would come through here.

"When it come so the Canadian traffic, apparently, from the second table I read, only 3 per cent. of the total tonnage originates in or is destined to Canada, notwithstanding the fact that there is 10.3 per cent. of the traffic interchanged with the Canadian lines, indicating that about 10 per cent. of the total traffic moves over the Canadian lines into or out of New England and then into or out of the United States, and we cannot quite work that out to show the full comparison there. There would have to be some equation of those figures.

"From some of the testimony offered by Mr. Brigham on
1192 behalf of the New England lines (Brigham Exhibit No. 6), it would appear that the New England lines claim that at the time the application for the increase in rates was made the lines in Central Freight Association territory and the Pocohontas lines were in need of a smaller percentage of additional revenue than the other lines in the Eastern rate district.

"Mr. Campbell referred (record, page 1169) to a statement that the Pocohontas lines would earn about $19,000,000 in excess of 6 per cent. on their aggregate cost of property devoted to public use.

"The fact that the Pocohontas lines haul a relatively small amount of traffic other than bituminous coal, and that the production of

bituminous mines during the past five years has been abnormal, owing to conditions resulting from the war, should not be overlooked. The abormal export demand and the change in distribution required by the United States Fuel Administration have been of substantial temporary advantage to those lines.

"I should like to offer as an exhibit a statement furnished at my requested by the Pocohontas lines, showing the net railway operating income separately for the months of September, October, November and December, 1920; December being partially
1193 estimated, and showing the relation of that to their property investment account."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 144, Witness Williams.

The witness continued:

"It is to be noted that there has been a substantial decrease in earnings and in net railway operating income in November as compared with the two preceding months, and that December shows a further substantial reduction in net railway operating income. The total reduction for the four Pocohontas roads is as follows:

"September	$1,646,527
"October	4,869,658
"November	3,286,852
"December	2,789,283

or at the rate of 6.36 per cent., notwithstanding the fact that at the time the figures for the constructive year were furnished it was estimated that these lines might earn a figure somewhere approximating that stated by Mr. Campbell.

"My Exhibit No. 138, showing the coal production of the country, 1910 to 1920, indicates that the production during 1920 was approximately 50,000,000 tons in excess of the average of the preceding 5 years and approximately 121,000,000 tons greater than the average of the 5 years immediately preceding the war. It shows an
1194 increase of about 98,000,000 tons over the year 1919.

"In view of the tremendous slowing down of industries and the large production of coal last year, which was the second in the history of the country, a substantial decrease in the output of the mines this year may reasonably be expected. Such a decline in coal production is certain adversely to affect the Pocohontas lines.

"If, as claimed by the New England lines, under the operation of the schedules provided for the Commission in Ex Parte 74 the New England lines should receive approximately $25,000,00 less than 6 per cent. upon their combined investment in property and if, on the other hand, the Pocohontas lines should receive approximately $19,000,000 more than the amount the indicated, it would follow that the lines in Trunk Line and Central Freight Association territory, excluding the Pocohontas and New England lines, would receive approximately $6,000,000 in excess of 6 per cent.

"This illustration indicates the situation or the status as between the lines handling interchange traffic with the New England lines

or handling traffic to and from New England states and those lines in the Central Freight Association and Trunk Line territory, which, while located together geographically, have no interchange business with the New England lines covered by through rates.

1195 "Mr. Hildum has discussed Mr. Brigham's Exhibit No. 6, sheets 3 and 4. In Mr. Brigham's Exhibit No. 6 the Erie Railroad and the Baltimore & Ohio were shown in the Trunk Line group only, no part of their operations being reflected in the Central Freight Association statement, notwithstanding the fact about 40 per cent. of the Erie mileage and about 65 per cent. of the Baltimore & Ohio mileage is in the latter territory.

"All the New York Central Railroad was included in the Trunk Line statement, while all of the subsidary lines were included in the Central Freight Association territory. These arbitrary arrangements controlled the comparative showing as between these regions. Transferring the Baltimore & Ohio and the Erie to the Central Freight Association group would entirely alter the result, and it would then appear that the Central Freight Association lines needed 29.013 per cent., instead of 24.431 per cent., and that the Trunk Lines needed 27.072 per cent., instead of 29.767 per cent. Were all Central Freight Association lines to be included in Mr. Brigham's exhibit, there would be some further changes in the percentages.

"In view of the effect of transferring these lines merely from one statement to another, where it is impossible to segregate their
1196 earnings, it indicates that there is no violence done to the trunk lines or the lines in the Central Freight Association group by the consolidation of all those lines into one rate group.

"Mr. Hildum's Exhibit No. 126 shows the property investment as well as the total operating revenues of the carriers in the Eastern rate group for the constructive year ended October 31, 1919, and the effect on these revenues of changes in passenger and freight tariffs suggested in the original and supplemental applications of the carriers in Ex Parte 74.

"These estimated results, however, were dependent upon the maintenance of the volume of business shown for the constructive year, upon the continuance of the operating revenues then received from the Pullman Company and the then basis of costs for labor, materials and supplies, etc. (See Shriver statement accompanying Exhibits Nos. 1, 2, 3, page 4, Ex Parte 74). They did not reflect the loss of earnings resulting from the new contract with the American Railway Express Company which became effective as of September 1, 1920.

"Mr. Hildum's Exhibit 126 indicates that over and above a 20 per cent. increase in all passenger fares, excess baggage and 39.75 per cent. in milk and a surcharge of 50 per cent. on all Pull-
1197 man Fares, the carriers estimated they would require 39.75 per cent. increase in all freight and switching revenues to enable them to earn 6 per cent. upon their aggregate investment in property devoted to public use.

"The New England carriers represent that, had they not been included in the Eastern rate group, the applications of the other

carriers, instead of showing a necessary increase of 39.7 per cent. in freight and switching revenues, would have shown only 38.41 per cent. (That is Brigham's Exhibit No. 7), a reduction of 1.59 per cent. below the full 40 per cent., and amounting to $25,666,236 per annum (page 47 of the record.)

"The New England carriers claim they are, therefore, entitled to receive approximately $25,000,000 per annum from the other carriers in the Eastern rate group.

"I have not attempted to go into the correctness of Mr. Brigham's Exhibits Nos. 6 and 7. I should like to comment, however, on the fact that, while the carriers showed they needed 39.75 per cent. as the case was finally closed, I think that Mr. Brigham, instead of making his comparison with the 39.75 per cent., makes the deduction between what was shown as needed and the full 40 per cent. To the extent that any fractional amount was given to the carriers, I assume that the Commission had in mind that that was to cover contingencies.

1198 "Attention is called to the fact that the New England carriers base their claim upon the estimates contained in the exhibits accompanying the applications of the carriers in Ex Parte 74, and not upon the award of the Commission, nor do they give consideration to substantial changes which have taken place since the application was filed or the award made. Their argument, however, is based upon conditions existing when their complaint was entered.

"It is necessary, therefore, that some analysis should be made of the estimates submitted by the carriers in Ex Parte 74 and of the results obtained by the carriers under the decision of the Commission.

"Volume of Traffic.—Although the aggregate revenue tons moved one mile during the year 1920 probably, when ascertained, will approximate the previous high record of 1918, the last three months have indicated a reduction of 12 per cent to 15 per cent in the volume of freight traffic in the Eastern rate district below the corresponding period of 1919. There has been also a substantial reduction in passenger traffic and further decreases seem probable.

"The New England carriers have called attention to the falling off in traffic in New England in October with a 'real falling off in November' (Record, page 35).

"The carriers in Trunk Line and Central Freight Associa-
1199 tion territory have suffered equal or greater losses in traffic due to the general depression in industry. The automobile plants are operating at not over 25 per cent of capacity; there is a corresponding reduction in output at the rubber factories and other establishments affiliated with the automobile trade. Many of the iron furnaces have been shut down. The output of the iron and steel mills, has been heavily curtailed. The tin plate plants are closed, and, in fact, all lines of industry except coal mines show reduced output.

"I will say that since preparing this I have noted, by the weekly reports of the Geological Survey, an indication of the falling off of about 1,000,000 tons per day in the production of bituminous coal

mines. An article appeared in the New York Evening World of January 26, 1921, from which the following statement has been prepared. I think possibly I had better just read it. It relates to an analysis made by the Department of Labor Employment Service. It says:

"'The Employment Service's figures represented a reduction of 36.9 per cent in the number of workers employed in industries as compared with January a year ago.

"'Michigan led the State in proportional reduction with 82 per per cent and Ohio and Indiana follow with a reduction 1200 in employment of 50 per cent each. Next came Illinois with 44 per cent, Connecticut with 43 per cent, Massachusetts with 38 per cent, Wisconsin, 32 per cent, New York, 28 per cent, and New Jersey, 22 per cent.

"'The largest percentage of reduction in specific industries, 69 per cent, occurred in the automobile and accessory industry.

"'Second in rank in the reduction of employees were the building trades with approximately 58 per cent.

"'A reduction of 35.5 per cent was noted in the textile and related industries; 35 per cent in leather and its products and 32 per cent in lumber and house furniture. The reduction in metals and products, machinery, electrical goods and foundry products was 30.5 per cent; in packing and food products 19 per cent, and in clay, glass, cement and stone products 19 per cent.

"'Numerically the greatest reduction was in New York City, where 234,243 were reported discharged. Chicago had a reduction of 86,000; Philadelphia, 76,000; Detroit, 160,000; Cleveland, 84,000; Boston, 25,000; Newark, 47,000; Cincinnati, 24,000; Milwaukee, 24,320; St. Louis, 49,250; Baltimore, 30,565; Kansas City, 20,640; Pittsburgh, 12,500; San Francisco, 13,000; Portland, Ore., 20,000; New Bedford, 30,000; Fall River, 25,000; Manchester, N. H., 21,000; Bridgeport, 20,000; Worcester, 10,000; Lawrence, 14,500; Lynn, 12,000; Providence, 17,500; Lowell, 11,000; New 1201 Haven, 10,000; Haverhill, 7,800; Springfield, 7,200; Paterson, 20,000; Rochester, 18,000; Scranton, 18,000; Jersey City, 15,000; Passaic, 12,000; Syracuse, 10,000; Reading, 7,000; Troy, 8,000; Utica, 8,000; Schenectady, 7,000; Trenton, 6,500; Camden, 3,000.

"'The unemployed in Wilmington, Del., was placed at 9,026 and in Washington, D. C., 8,612.'

"The total reduction in the Southern states, including Kentucky, was only about 100,000. The statement says that the director's figures show the number of unemployed in the country as 3,493,466. From those figures it indicates that the amount of unemployment is greater west of New England than in New England. There will be a further loss to the Eastern railways over and above the reduction from the slackening of industry due to the diversion of freight on account of the difference in the percentage of increase in freight rates authorized for the several rate districts, thereby changing differentials formerly existing. For example, the Gulf ports formerly

enjoyed a differential of 5 cents per 100 pounds, as against Atlantic ports on export grain traffic, while under the new rate schedule, this difference has been increased to 14 cents per 100 pounds,
1202 due to the difference in the percentage of rate advance in the two rate groups. Therefore, unless the rates to Gulf ports are increased, the lines in the Eastern rate district will have to reduce their rates to Atlantic ports, thus reducing their freight revenues below the authorized rates, or suffer a substantial loss of revenue through diversion of grain to the Gulf ports.

"The copper producers have arranged to divert practically all their Atlantic seaboard traffic from the all-rail routes to the rail and water routes, thus further reducing the revenues of the carriers in the Eastern rate district.

"The inter-territorial rate advance of 33⅓ per cent applies to coal from the Kentucky coal fields to points in the Eastern rate district, while an advance of 40 per cent was made on coal produced by mines located in the Eastern rate district, and destined to points within said district, thus materially changing the differentials formerly existing. Unless corrected, there will be a substantial diversion, and on the tonnage thus affected the lines within the Eastern group will receive but 33⅓ per cent increase. Presumably similar diversions of other traffic will occur, but it is too early to forecast the full effect of these changes.

"The carriers other than New England carriers in the Eastern rate district will not earn $25,000,000, or any other sum, in-
1203 creased by 6 per cent, upon their investment in property devoted to public use, but will actually earn much less than 6 per cent.

"The Commission, in its decision in Ex Parte 74, did not grant the full increase in freight, passenger, switching, and other revenues requested by the carriers: (*a*) there was no change in the minimum carload charge, minimum class scale, nor in the minimum charge per shipment; (*b*) inter-territorial freight rates—that is, rates between points in the Eastern rate district and any points in other rate districts—were increased only 33⅓ per cent. The difference between 33⅓ per cent. and 40 per cent., applied to the traffic affected, is estimated to cost a substantial loss in the freight revenues of the carriers in the Eastern rate district, of which only a small portion will be lost to the New England carriers. On the traffic that is interchanged by the New England lines with their connections, only a small part goes beyond the eastern rate group, while to the Trunk Lines, and more particularly the C. F. A. lines, they have a very heavy volume of traffic that is affected by reason of the large interchange with the other rate districts.

"The following statement shows increases in rates obtained by lines in Eastern territory under Ex Parte 74. It takes in four col-
1204 umns: New England, Trunk Line and Pocohontas; C. F. A., (except Illinois Freight Committee territory); and Illinois Freight Committee territory.

"Traffic to and from Southern territory, 33⅓ per cent. to each of the four districts.

"Southwestern territory: To and from New England and Pocohontas, 40 per cent.; to and from points in C. F. A. territory, except the Illinois Freight Committee territory, 33⅓ per cent.; to and from Illinois Freight Committee territory, 35 per cent.

"Western Trunk Line territory: To New England, Trunk Line and Pocohontas, and F. C. A. territory, except Illinois Freight Committee territory, the percentage is 40; and to Illinois Freight Committee territory it is 35.

Northwestern territory, 33⅓ per cent. to and from New England and to and from Trunk Line and C. F. A. except Illinois Freight Committee territory (except as modified by Note 1, below); and 35 per cent. to Illinois Freight Committee territory.

"Intermountain and Pacific Coast territory, to New England, eastbound, 33⅓ per cent.; westbound, 40 per cent.; except from Boston and immediate vicinity on westbound traffic. Trunk Line is 33⅓; C. F. A., 33⅓, excluding Illinois Freight Committee territory; and 33⅓ to the Illinois Freight Committee territory.

1205 "The Illinois Freight Committee territory is 40 per cent. for each of the four groups.

"Between C. F. A. territory and New England, eastbound, it is 37½ per cent.; westbound, 40; Trunk Line, 40; C. F. A., except the Illinois Freight Committee territory, 40; Illinois Freight Committee territory, 40.

"NOTE 1.—Small volume of traffic to and from Southern territory, governed by sums of local rates on which carriers in Eastern group received 40 per cent. increase.

"Then, there is a modification of the Northwest territory in C. F. A. group, excluding the Illinois Freight Committee, on bituminous coal from Indiana mines to the Northwest, and also to Missouri, on through rated traffic, a 35 per cent advance; and, as stated, on the eastbound traffic from Intermountain territory and Pacific Coast territory to New England, it is 40 per cent., except from Boston and immediate vicinity on westbound traffic.

"EXPLANATORY NOTE.—In the case of the Illinois Central north of Cairo, which is in the Eastern rate group, in addition to the traffic to and from points on that road north of Cairo included in the table on which the Illinois Central would get less than 40 per cent., it also includes all traffic between points north of Cairo and all of Western Trunk Line territory, except traffic in what is known as Illi-

1206 nois Freight Committee territory.

"In the case of the Wabash Railroad, in addition to traffic shown in the table, it includes all traffic to and from points on that road in Illinois, Missouri and Iowa; to and from all of Western Trunk Line territory, except what is known as Illinois Freight Committee territory. That will be commented on more by Mr. Maxwell, at a later time.

"The application to the Commission and presumably the decision of the Commission, were based upon the contracts then in effect with

the American Railway Express Company and with the Pullman Company. The contract with the express company expired with the termination of the guarantee period, that is, on August 31, 1920, and a new contract became effective as of September 1, 1920. On the basis of information obtained from the express company officers, it is estimated that the receipts of the carriers in the Eastern rate group from express will be approximately $32,000,000 per annum less than the amount shown in the constructive year in Ex Parte 74, and this means a reduction of $32,000,000 in the amount available for return on the investment in property devoted to public use. Of this $32,000,000, the loss to the New England carriers will be approximately $4,683,000.

"The contract with the Pullman Company, I may say, continues to be the subject of discussion with that company. Carriers
1207 are not receiving the full benefit of the award of the Commission in Ex Parte 74. All the New England states permitted increases in intrastate rates equal to the increases authorized by the Interstate Commerce Commission. This was not done by all the other states in the Eastern rate group. I am not sure as to New England, with reference to commutation travel, but I understand that is correct as to all the others. That was the statement made to us by the railroad executives of New England. This was not done by all the other states in the Eastern rate group. The increases in passenger rates in Illinois were secured in December, 1920, and in New York were secured, only in part, during the same month, and then by means of court proceedings, prior to which the carriers in Illinois suffered a loss from this source of $2,096,472, and those of New York, a loss of approximately $4,000,000. The increases have not become effective on intrastate passenger traffic in the states of Ohio, Indiana, or Michigan, and only partially on intrastate freight traffic in Indiana and Illinois. The loss resulting is estimated at $3,070,462 per year in Illinois, $5,558,293 in Indiana, $2,978,960 in Michigan, and $5,018,045 in Ohio. I understand a decision has been handed down within the last two or three days in connection with Ohio, and in connection with the freight in Illinois, so
1208 that carriers may reasonably hope to get the matters adjusted, at least as to those rates within a short time.

"Certain increased operating costs were not included in the constructive year in Ex Parte 74. The cost of coal is 50 cents to $1 per ton greater than the cost which was included in the estimate of the carriers. It is hoped that under normal conditions the price will be as low as the price used in the constructive year. However, as the coal year ends on March 31st, no change in contract coal can be secured prior to April 1st next. No allowance was made for a possible under-statement of maintenance cost, resulting from under-maintenance during the period included in the constructive year. (See Shriver's statement above referred to, that is, the one putting in the exhibits Nos. 1, 2, and 3, accompanying those exhibits.)

"I will offer a letter from Mr. Parmelee, Director of the Bureau of Railway Economics, to myself, dated January 13, 1921, inclosing an analysis of the net operating income compared with 6 per cent., on

valuation, for class 1 roads, Eastern district, showing New England district separately.

The letter referred to was received and marked in evidence Defendants' Exhibit 145, Witness Williams.

Referred to his embargo exhibit, the witness continued:

"I had only proof copies for the Erie, and one other com-
1209 pany. They have been turned over to the reporter; also the New York Central. We will see that copies are given to you of each of those. I will have all except the New York Central here probably tonight or in the morning, and then we can furnish those for your consideration.

"The New York Central was not in type. We will give you a typewritten copy of it.

"This exhibit, No. 145, contains figures compiled by the Bureau of Railway Economics. These data show that during the three months which ended with November 30th, 1920, the railways of the Eastern rate groups failed, by $50,499,212, to earn at the annual rate contemplated by the Commission in its decision in Ex Parte 74. The facts are summarized as follows:

"Income, three months, at annual rate of 6 per cent. on value, New England lines, $13,796,000; other lines, $129,613,000. Total, Eastern rate group, $153,409,000. Actual income, three months, New England lines deficit, $459,405; other lines, operating surplus, $93,3 9,193; total, $92,909,788. The shortage, as compared with 6 per cent., is, for the New England lines, $14,255,405; other lines, eastern rate group, $36,243,807; total shortage, Eastern rate group, $50,499,212.

"The New England lines represented in the foregoing are
1210 the New Haven, Central New England, Boston & Maine, Central Vermont, Rutland, Boston & Albany, Bangor & Aroostook, Canadian Pacific, Grand Trunk and Maine Central. The figures do not take into account lapover items growing out of the settlements with the United States Railroad Administration.

"Mr. Parmelee informed me that he took the relation which these three months bore to a year's earnings, on the basis of past performances, and used that as his basis in arriving at the average, at the annual rate, what might be expected for a year. That was, for the Eastern rate group, not totaled. He has used the same method of figuring in making his estimate for the New England lines. On this basis, for the three months, all the carriers in the Eastern rate group collectively would earn at the rate of 3.9 per cent. on the value of the properties as assumed by the Commission for the purposes of its order. Eliminating the nine New England lines from the group, the balance of the group actually earned at the rate of 4.3 per cent. per year. That was an earning less than the average of any year for 20 years.

"It is submitted that there could be no justification for further reducing lines that are actually in receipt of much less than the statuatory rate in order to increase the operating income of other lines.

1211 "Would the changes proposed in this proceeding, considering the New England lines alone and irrespective of injustice to their connections, divert revenues to the railways and in the proportion by which it is needed? It has been shown that the changes applied for in this case could not be accorded without taking from carriers which are already earning less than a fair return upon the fair value of their property, and there is nothing in the way of peculiar disability of a nature that could entitle the complainants to what they seek.

"It is now to be noted that if the foregoing could be disregarded the changes sought, while working a redistribution of revenues, would not produce an equitable redistribution and would not afford relief to the lines by which it may seem to be needed or in proportion to their necessities.

"It is noted, of course, that although there are 10 New England lines, only 7 of them are parties complainant in this proceeding. The Boston & Albany, the Grand Trunk, and Canadian Pacific, are not asking relief. I am referring there only to class one lines in speaking of the 10 and 7. It would be impossible, however, to grant relief in the form sought without extending the same favor to these carriers. Whatever additional revenues should accrue to them on account of such action would be in addition to the total which
1212 the complainant lines seek to divert.

"Moreover, the amounts diverted to New England would be drawn most unfairly from the other carriers. The claim of the New England lines is that by reason of their inclusion, the other railways in the Eastern rate group gained 1.59 per cent., (Mr. Brigham's Exhibit No. 7) in the percentage increase accorded to them. If this is true, no railway outside of New England gained more than 1.59 per cent. I am not discussing the correctness of that percentage, but merely its application; but the amounts proposed to be diverted to New England would be drawn, in a preponderating extent, from the immediate connections of the New England carriers, and almost wholly from the railways that would thus be compelled to sacrifice more than they are alleged to have gained.

"I will offer a statement, which will be Exhibit No. 146, which shows, for the 7 complainant lines, and then for the Boston & Albany, and then the total for the 8 lines, in the first column, 6 per cent. return (Brigham Exhibit No. 6); the second column, the estimated net railway operating income of the 7 New England lines based on the constructive year October 31, 1919 (Brigham Exhibit No. 6, Sheet 2, Column 5; Column 9); the third column is the estimated net railway operating income of 7 New England lines
1213 based on the year ended June 30, 1920, (Mr. Brigham's Exhibit No. 1); the fourth column shows the net fixed charges to be met out of operating income (Brigham Exhibit No. 3); the fifth column shows the estimated amount by which roads will fail to meet fixed charges, based on the year ended June 30, 1920 (Brigham Exhibit No. 3); the sixth column shows the alleged deficiency for each line, on account of the New England lines being included in Eastern rate group—that is, Column 1 less Column 3; Column 7

shows the revenue from proposed arbitraries, based on data given to me by Mr. Choate.

"This Exhibit 146 shows the facts in detail. Among other things, it shows that the Boston & Maine, which claims to have a deficit below the amount necessary to pay 6 per cent. upon its cost of property of $2,507,444 per year, would receive $8,351,000, or almost three and a half times this deficit out of the total diverted. On the other hand, the New York, New Haven & Hartford, which claims, on the same basis, a deficit of $13,946,930, would receive $9,824,000. Similar inequalities would exist with respect to the other lines. No basis for a redistribution of amounts thus diverted to New England has been suggested, and no method is known by which a redistribution within that territory could be made. I am speaking now as to the record in this case. Certainly it could not be made to the prejudice of the United States, if the Government has a substantial interest in revenues in excess of 6 per cent.

1214

"I shall now take up the subject of conferences with New England lines. Reference has been made in the testimony by Mr. Elliott, at page 522 of the record, to a discussion between representatives of the parties in this proceeding which, while dealing with some of the matters that have been brought to the attention of the Commission, has no real connection with the question here pending, which is whether the New England railways are entitled under the law to the increased divisions they seek. A committee of 12 presidents, three of whom were from New England, was appointed, and I was elected as the chairman. At a certain stage of the progress it was arranged that the railways of the Eastern rate group outside of New England should be represented in them by President Rea of the Pennsylvania Railroad, President Maher of the Norfolk & Western, and the present witness, Chairman of the Board of the Wabash Railway. The New England Railways at the same time designated President Hustis, of the Boston & Maine, President Pearson, of the New Haven, and Mr. Choate, of counsel in this proceeding, as their representatives.

"The foregoing met, and the New England representatives were informed at the outset by the representatives of the other rail-
1215 ways that the latter considered the existing divisions of through rates applicable to traffic in and out of New England as not only reasonable and just, but exceedingly liberal to the New England carriers, and that no enhancement of the proportions east of New England gateways could be conceded.

"The representatives of the lines west of New England inquired of the New England representatives whether, if the former were to recommend to the presidents of their constituent lines that if they could do so, with the approval of the Commission and without prejudice to the rights of the respective parties, they should raise, during the year beginning with December, 1920, the sum of $12,000,000, to be paid to the New England lines for that year only, said action would be acceptable to the New England lines. This suggestion was not received favorably by the New England representatives, and thereupon all representatives of both sections of the rate group re-

ported to their constituent railways that they were unable to make any recommendations in the premises.

"The foregoing is the complete record of the so-called compromise offer of $12,000,000, and it is submitted that there is nothing in this incident which could properly affect the judgment of the
1216 Commission in this proceeding.

"The committee of three executives, representing the lines outside of New England, in expressing their willingness to recommend a payment of $12,000,000, limited, as stated, at all times insisted that the offer that they were proposing to suggest was not based upon a concession of legal right, but that, on the contrary, they were fully satisfied that the present allowances to New England lines out of the through rates are as great as could be admitted or justified in law. The offer was based, and was understood to be based, wholly upon a willingness to go as far as possible in relieving the immediate financial condition of the New England carriers, and to make the utmost sacrifice that could be justified in law or ethics in order to protect the general railway credit situation, which it was recognized might be impaired should any New England line be unable to extricate itself from present difficulties. It was prompted by the view that a payment of the amount stated, during the year referred to, would afford these carriers ample time to rearrange their own schedules of rates and in other suitable ways to equalize their expenditures and income or otherwise satisfactorily to adjust their financial responsibilities.

"There has been introduced, on behalf of the New England lines, Choate Exhibit No. 1, page 20, a copy of a letter written by
1217 Vice-President Campbell, of the New York, New Haven & Hartford Railway, to the Chairman of the Interstate Commerce Commission, dated April 10, 1920. In view of the introduction of this letter, it is considered that further correspondence concerning the same subject matter should be made a part of this record. A copy of the letter of Mr. Campbell, above referred to, was sent to Mr. G. H. Ingalls, Vice-President of the New York Central Lines, and Mr. Ingalls thereupon, under date of April 14, 1920, wrote to Mr. Campbell, sending copies of his letter to Mr. W. C. Maxwell, Vice-President in charge of traffic of the Wabash, and Mr. George D. Dixon, Vice-President in charge of traffic of the Pennsylvania Railroad. Mr. Ingalls' letter follows:

"To Mr. B. Campbell, Vice-President of the New York, New Haven & Hartford Railroad Company, from Mr. George H. Ingalls, Vice-President, New York Central Lines, dated April 14, 1920:

" 'Referring to your letter to Mr. Clark, Chairman of the Interstate Commerce Commission:

" 'According to my recollection the New England lines never discussed with our committee the question of the division or apportionment of the rate increase in respect to our various territories within the Official Classification territory.

" 'I am not disposed to criticize, but is there not some

1218 danger that the Commission might consider your letter as voicing the views of our committee in the fact that we were considering and devising means of distributing a greater increase to New England lines, and in view of the fact, as stated above, that this has not been discussed or any conclusion arrived at by our committee, it might be well to point that matter out to the Commission.'

"Mr. Campbell's reply to the above letter was as follows:

"To Mr. G. H. Ingalls, Vice-President, New York Central Lines, from B. Campbell, Vice-President of the New York, New Haven & Hartford Railroad Company, dated April 14, 1920:

" 'Answering your letter of this date:

" 'My letter of the tenth instant to Chairman Clark was purely a review of the subjects that were orally discussed at the informal conference with the Commission, held on the 7th instant, and was put in written form in compliance with the suggestion from the Chairman and one or two members, that the things that were said be placed before the Commission in written form.

" 'Commissioner Hall asked me the question whether an average percentage increase would meet the New England roads' requirements, to which I replied that it would not, but that the New England roads were anticipating that a way might be found for passing to them the difference, as stated in my letter.

1219 " 'Personally, I do not consider the matter under discussion one of option with the lines connecting with the New England carriers. If an average percentage increase should be granted, which is made up of the requirements of the New England carriers, there will be a given sum of money in the possession of the connecting carriers which will belong to the New England roads, and the Commission will, naturally, be asked by those carriers to have that money reach them through some method, the form of which will be suggested to the Commission.

" 'Under the circumstances, there is no qualification to my statement that could be made to the Commission.'

"As indicating that the New England lines did not feel that there was any commitment made by the lines west of Pittsburgh, Mr. Pearson, President of the New York, New Haven & Hartford Railroad Company, under date of May 9, 1920, addressed identical letters to various members of the Eastern Presidents' Conference. The following, received by me, is a copy of Mr. Pearson's letter. This is a letter from Mr. E. J. Pearson, President of the New York, New Haven & Hartford Railroad Company, to various members of the Eastern Presidents' Conference, dated May 9, 1920——

"(The witness thereupon read the letter referred to.)

1220 "The matter was the subject of discussion at some meetings, some committees were appointed, and some reports were made, but the carriers were unable to work out a solution among themselves.

"In conclusion, it is evident that the New England lines can materially reduce the cost of their coal. They should make substantial savings in per diem and other charges. Over and above this, they may be in need of additional revenues. If they are to remain in the Eastern rate group, they should be secured through a readjustment of New England rates. If this cannot be done without violence to the general rate structure in the Eastern rate group, it should then be accomplished by placing the New England lines in a separate rate group.

"In connection with less than carload movement, the tonnage interchanged between the Delaware & Hudson and the Boston & Maine for the first 11 months of 1920 showed that we gave to them 135,082 tons of less than carload freight, and we received in exchange 236,492 tons. Inasmuch as according to the reports the l. c. l. tonnage on the New Haven is considerably in excess of that of the other lines, it would seem fair to assume that the percentages might be in even greater proportion. But I have not been able to get the figures as to that.

1221 "There are two other exhibits. I would like to offer a statement showing the operating statistics of the railroads in the New England states for the year ended December 31st, 1918, prepared from the Interstate Commerce Commission report, a preliminary abstract of statistics of common carriers, for that year."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 147, Witness Williams.

The witness continued:

"Also a statement showing the operating statistics of the railroads in the Eastern district, excluding the New England district, and showing the total for the Eastern district of all the lines there, taking the figures as reported by the Commission in its preliminary abstract. They show the Eastern district, and then we have pulled the New England district out of that, so as to show the total, excluding them. Then, the Commission had thrown some of the Pocohontas lines into the Southern district, and we pulled the Pocohontas lines back into it, so as to show the total of the Eastern district, excluding the New England lines."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 148, Witness Williams.

The witness continued:

"That is generally to show the ton mile, train mile, car
1222 mile figures, etc., on a comparative basis, taken from the Commission's report.

"Then, I would offer as an exhibit a statement compiled from the operating statistics bulletin, issued by the Interstate Commerce Commission. This statement shows the figures for April and September, and also for the first 9 months ending with September, 1920, compared with a corresponding period of 1919."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 149, Witness Williams.

The witness continued:

"That is the Commission's monthly bulletin, and it makes various comparisons. I have another exhibit I would like to offer, being an analysis of freight and passenger train earnings on 14 roads operated exclusively in Trunk Line territory for the calendar year 1919. The information shown thereon is compiled from statistics in Poor's Manual of Railroads for 1920."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 150, Witness Williams.

The witness continued:

"That shows the information for each of these roads that operate exclusively in Trunk Line territory, excluding the New England lines. Two other lines really should have been included
1223 there in a statement of that kind. I think the Virginian and the R. F. & P. really do operate exclusively in that territory. The Norfolk & Western and the Chesapeake & Ohio extend into C. F. A. territory. That shows the figures, and then the grand total for those lines. It is interesting to note that the average haul per ton per railroad is 120.98. It is not materially different from New England, when you consider that these are simply the railroads that do not go beyond the Trunk Line territory. The exhibit gives further information also.

"The average haul per road in New England district, in the year 1919, was 112.47.

"I would offer a statement that shows comparative figures by roads, and then the average haul per road in New England, for each year, 1910 to 1919, both inclusive."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 151, Witness Williams.

Asked whether, when he considers the traffic and operating conditions in New England, and the per cent. of engine ratings which they are able to secure, and the train loads, what conclusion he reaches as to the reasons for the light train loads, the witness said:

"The fact that out of each thousand pounds tractive power, they had a greater percentage of gross tons back of the engine
1224 than we did indicated that whatever the conditions were that tend to reduce the tonnage in a train, the adverse effect thereof was less in New England than it was on the lines west of New England. They had a slightly better percentage. The gross tonnage back of the engine, the percentage of that gross tonnage to the hauling capacity of the engine, was a little bit better than west of New England.

"Comparison of the tractive power shows that, as to that, it did not adversely affect the tonnage that they got back of the engine. So far as the junction points are concerned, or the terminal facili-

ties, by reason of the fact that it simply showed the total per ton mile, without separating carload and less than carload, and without separating the traffic local to New England, or local to one line, as against the traffic interchanged with connections, it is difficult to reach a conclusion as to what the situation is on the interline traffic. I have already explained the difference between the character of traffic they give to us and the class of traffic we give to them. We give them carload traffic considerably in excess of what they give to us. For example, take carload tonnage. The Delaware & Hudson Company gave the Boston & Maine, in 1916, 4,630,058 tons of carload freight, and received from them only 732,830 tons of carload freight, or about one-sixth.

1225 "In 1917 the Delaware & Hudson gave the Boston & Maine 5,630,849 tons of carload freight, and received in exchange 806,781 tons of carload freight.

"I have already stated as to the difference in the l. c. l., indicating that it is much greater westbound than eastbound. The figures as to the Boston & Albany are relatively in the same proportion as to the Boston & Maine. The carload traffic in 1916 to them was 513,248, and from them was 81,825 tons; in 1917, to them, 440,141 tons of carload traffic, and from them, 108,591 tons.

"On less than carload tonnage, the Delaware & Hudson gave them in 1916, 21,044 tons, and received from them 20,352, being almost the same. In 1917 the Delaware & Hudson gave them 16,570 tons, of less than carload freight, and received in exchange 19,883 tons.

"Only one thing. I only want to say that I cannot help reaching the conclusion, in going over it, that the New England lines have been operating under exceptional conditions during the last year, at least, and possibly during the war period, the full effect of which I am unable to state."

Asked with regard to his references to the situation of 5 particular trunk lines and C. F. A. lines, to wit, the C. & O., the Norfolk & Western, the Virginian, the R. F. & P., and the Southern,

1226 what was the purpose he had in mind in separating these particular carriers from other trunk line and C. F. A. roads and using the combined results of these five roads in this, a division case, the witness said:

"Well, there are two things connected with it. In the first place, the data of the Interstate Commerce Commission has thrown their statistics in the Southern district, notwithstanding the fact that these roads have been members of the Trunk Line Association for many years. I assume that is simply an oversight in the classification. It is an old method, because their traffic is more in harmony with that of the Western Maryland, the B. & O., and to some extent the Pennsylvania."

The Director General, during the period of Federal Control, had a separate regional director for some of the lines in that group, or in that geographical territory, and it was known as the Pocohontas group, for operating purposes. Therefore the statistics of the Di-

rector General showed them for that territory separately. They showed them for New England separately, and then they showed them for what is known as the Allegheny region, where Mr. Markham was in charge. Mr. Smith's territory was divided into three groups, the Ohio-Indiana, the New England, and one other group, after the Allegheny group was taken away, and the Pocohontas; but Mr. Smith's Eastern district originally included them all.

1227 The witness continued:

"So, in throwing the tables together, it was necessary to pick them out, and I have endeavored, so far as possible, to simply use the figures as they come in the official reports, making it easier to handle it, in going over the record and checking it up.

"Furthermore, in tabulating those figures, when I first looked into the situation I was under the impression, by reason of the inclusion in the Southern group, that those lines were Southern lines, and I did, in preparing a memorandum for consideration of the railway executives, suggest that among other things they might consider the question of whether the Pocohontas lines should be construed as a separate group, assuming that New England was to be considered as a separate group; but there never was any discussion of that subject in quite that way. The real purpose of bringing it forward in the subsequent discussion is to show that here are five lines—now only four, because the R. F. & P. and the Washington-Southern were consolidated; the R. F. & P. and the Washington-Southern, I do not believe, have ever been construed as a trunk line up to this time.

"Then, these lines constitute five lines which operate in Trunk Line and C. F. A. territory, and yet have a distinct geograph-
1228 ical location. When we come to consider the question of divisions as between the New England lines, we find that these lines have practically no interchange with New England. If the statement of facts be as stated by Mr. Brigham, and further changed in the exhibits by Mr. Hildum, the amount that they got, or were expected to get, but which they are not getting—and it is all based on hopes—was going to be in excess of 6 per cent, by about the same amount as the New England lines claim to have lost below 6 per cent. There are no divisions between them. Then, it seemed to follow naturally that as to the rest of the roads in that group, which did have interchange with the New England lines, those lines in the group were not earning substantially above the 6 per cent."

It is not witness' desire, in referring to the Pocohontas lines in this proceeding, to have any inference drawn that these lines are not properly trunk lines and C. F. A. lines, and therefore properly included in the Eastern group.

Witness sees no difference between his own statement and Mr. Hildum's statement with regard to the object of Mr. Hildum's Exhibit No. 126, except that witness goes back into the history of the development of the Pocohontas proposition.

Cross-examination:

Mr. Pearson's letter of May 9, 1920, was addressed to the
1229 Presidents of the Eastern Conference. That is a little different from the Eastern rate group. It consists of presidents who have offices in New York. Witness thinks they do forward them to the presidents of other Eastern lines, and then any president who may have an office in New York, or who may be there. There were no written replies made by the presidents of the Eastern Conference to that letter. There were a number of meetings at which Mr. Pearson was present. There were two committees appointed, to consider his suggestion, a Traffic Committee and an Accounting Committee. They made two or three reports. Witness cannot say the date of the report.

Asked whether they did not in that report say among other things in reply to Mr. Pearson's suggestion the following:

"Statements show the percent of increase in freight revenue necessary to produce a railway operating income equaling 6 per cent of the property investment by individual roads, summarized to show separately totals for New England, Trunk Line, and C. F. A. territory. The percents are as follows:

"(1) New England, 47.407 per cent; (2) Trunk Line, 29.767 per cent; (3) C. F. A., 24.434; (4), total 29.461 per cent; (5), Trunk Line and C. F. A. combined, 27.081 per cent; (6), excess of (4) over (5) (that is, excess of Trunk Line and C. F. A. combined over the total), 1.48 per cent."

witness replied:

"Well, I would have to accept that as your statement. I could not possibly carry all those figures in my mind and say at this time that those were the exact figures."

Asked whether that committee reported this $24,000,000 or $25,000,000 which has been discussed as having gone principally to the C. F. A. lines, the witness said:

"It is my recollection that some statement of that kind did indicate that, and that was why I have shown in here the fallacy of that line of reasoning, because it is simply estimates made at the time."

There have been several statements made, but it is rather difficult in a rate group like this, and with the many conflicting factors, to get at the facts. They have been working diligently, and did all the way through. They have tried to get the New England lines to agree with them on the facts.

1230 Witness did not attribute to Mr. Campbell the origin of this suggestion that the $19,000,000 went to the Pocohontas lines. He said Mr. Campbell made reference to it in the record. Witness said that he himself was the man who first raised the Pocohontas question. He does not know that he stated the exact amount. He did not prepare the figures. He is simply using the figures which the Conference Committees got together. It is quite impos-

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sible for him to go through all these details. There have been different people having different ideas.

As to the $19,000,000, witness would say that if the lines in this Eastern group are not earning over 3.9 per cent., it certainly does not exist any place.

Witness' Exhibit 144 shows that although it was claimed that there was a statement furnished in Ex Parte 74 that showed certain lines would earn in excess of 6 per cent., and these lines did anticipate at that time that they would earn in excess of 6 per cent., this shows that their estimates were quite above the actual results.

Asked whether the history of this $25,000,000 is that it was chased into C. F. A. territory, and then into the Pocohontas lines, and now it is gone altogether, the witness said:

"Back of all that is the question of whether there was $25,-
1231 000,000. We never could agree on whether there was or not."

Mr. Pearson's letter was never answered in writing. Mr. Pearson, the following day, sent a message, in which he asked a conference, and there was a conference. It was considered at different times, but they were unable to agree; so that witness should not want to leave the impression that it was never answered.

Referred to the conference in New York, at which the $12,000,000 proposition was submitted, the witness said that reply was made to that, that $12,000,000 would not enable the New England lines to meet their fixed charges. At that time they could not agree on the figures in the case, the New England representatives and defendants' representatives.

Witness does not understand that they discussed with the New England subcommittee the method in which they would raise the money, and they never reported the result out to the people as a whole. That was what defendants thought they might have to do, if they could get the lines to vote on the proposition, and if the New England had accepted it, that is probably what they would have recommended.

Witness also said at that time that defendants had not realized the
full 40 per cent. on their interchange business with the South
1232 and West, and had not realized their whole 40 per cent. on
certain intrastate rates, and they have not yet.

Asked whether the New England lines replied that if that was so and defendants had not realized all that they hoped they would under the order in Ex Parte 74, the New England lines were willing to share that loss with them, and they offered to accept 1.1 per cent. of defendants' freight revenues, the witness said:

"No. That is not quite the proposition. That leaves the impression that you are comparing 1.48, or 1.47 and 1.1. You will recall that when you made that statement in the meeting of the presidents as a whole, I then asked you if it was not the fact that 1.1 per cent. upon the current freight revenues would be expected to produce 1.53 or 1.54 per cent. upon the freight revenues shown in Ex Parte 74, and you answered in the affirmative. So, when we talked about

those, we were talking relatively about the same thing, only stated in two different ways."

Asked whether he recalled that the New England lines did make the counter-proposition that they would accept 1.1 per cent. of defendants' freight revenues, the witness said:

"That was not coupled with it, however, the fact that we did not get the full 40 per cent. We were discussing the question of
1233 the 1.48. You then jumped up your figures, and you have gone to 1.53 or 1.54, or something of the kind, and you were asking that you get the equivalent of 1.53 or 1.54 on the basis of Ex Parte 74; but then, if instead of that, we would simply base it on current revenues, on the 1.1 per cent., if we would get more than that, you would get more, and if we got less than that, you would get less, so that the relation of that to Ex Parte 74 would be dependent upon the amount of business. That would not compensate us in the slightest degree for the loss that we would sustain on inter-territorial traffic, for the loss on intrastate traffic, or for other losses of a similar nature; nor would it protect us against the changed conditions in the way of increased operating costs and things of that kind. It would not let us break even at all."

The proposition that the New England lines would take 1.1 per cent. of the defendants' freight revenues was not based on whatever they were, but on whatever they might be in the future.

The New England lines based the willingness to accept 1.1 per cent. on the current freight revenues from month to month, whatever they might be, and that the defendants declined. That is all the New England lines were asking for in this case, and a little more.

That is a correct statement because if the revenues did not de-
1234 crease it would be based on gross revenues, and not net. If defendants' freight revenues sell below what they were in 1919, or if their business fell off from what it was in 1919, the New England lines would receive a pro rata reduction. The figure 1.48 is based on the revenue for the constructive year in Ex Parte 74. The figure of 1.1 is not based on the same amount. When you jump to your 1.1, that was based on those revenues, plus 40 per cent., in Ex Parte 74. That is quite a different thing; and when you take the 1.1 and apply it to 1.40, it becomes 1.54, so that your 1.1, instead of being less than 1.48, as a matter of fact, is 6 points greater.

Asked whether it was not pointed out by New England Lines that the 1.1 applied to revenues that the Trunk Lines then said they were going to receive instead of being six points greater would have been about $6,000,000 less, and would yield from $18,000,000 to $22,000,000 instead of $25,000,000, witness replied that he did not know how they got at that amount because that would all depend upon what the revenues were.

Asked whether these figures were not stated to them at the time, witness replied:

"I don't recall it. If you state it, I would be perfectly willing to

accept your statement for it, Mr. Choate, but I do not recall that figure."

Thereupon the following question and answer were made a part of the record:

"Q. If you are going to discuss the conference, I want you not to leave the impression that you made a proposition of $12,000,000 and we turned it down, without making any counter proposition. We want to have the whole of it in there.

A. I am glad to have it all in."

Adjourned to Saturday, January 29, 1921, at 10 o'clock a. m.

1235 Washington, D. C.,
January 29, 1921—10 a. m.

H. S. BRADLEY, heretofore called as a witness on behalf of defendants, was recalled and testified further:

Direct examination (continued):

Asked whether he had prepared a memorandum giving a list of some of the comparable hauls in C. F. A. territory and New England territory that appear in Mr. Eaton's and Mr. Wood's exhibits, the witness referred to certain papers which were received in evidence and marked Defendants' Exhibit 128, Supplement, and Defendants' Exhibit 129, Supplement, Witness Bradley.

Witness has made some independent studies of the division situation as between C. F. A. and New England lines.

Asked whether he could give any idea of the considerations that he took into account in examining the question of the fairness of these divisions, the witness said:

"Yes, I can. I think perhaps it would be better for me to show the method in which we approached this question.

"In the complaint in this case our New England friends allege that their divisions with Central Freight Association carriers are unjust, unreasonable, and inequitable. Now, as between a
1236 group of carriers who have maintained joint relations and joint prorating arrangements for a long period of years, my personal view is that that is a serious charge to make.

"Independent of the issues of the case, we had some slight curiosity to know what, if any, truth there was in that. So, in order to find out, we undertook a more or less independent investigation of the question of divisions, in so far as the Central Freight Association lines are concerned. I would like to read into this record what guided us in making that investigation and analysis.

"The division of freight revenue is a matter of agreement between interested roads, and in the arrangement of divisions no fixed rules prevail. There are, however, certain broad principles or guidances commonly recognized in the fixing of divisions, as tests of their fairness. These are, namely:

"First, each road is divided into groups for division making purposes.

"Second, these groups shall be reasonable in size and fairly constructed so as to reflect, as a whole, traffic conditions for the entire group. It is not ordinarily considered fair to so draw the group boundaries as to result in the location of the large tonnage
1237 producing points too close to the inner boundary of the group.

"Third, the pro rating mileage is established for each group by agreement, which mileage generally bears a rather close relation to the actual mileage to the farthest point in the group.

"Fourth, a reasonable minimum allowance is usually provided to cover short hauls.

"Fifth, competitive situations have some influences in the fixing of divisions between roads, and it is not an infrequent practice for the long route to equalize the divisions of a short line, and the stratgetic position of a road in relation to the control of its traffic is an important consideration when there are a number of carriers competing for the traffic."

Almost any consideration may have affected divisions that was of such a nature that it appealed either to the reason, the fears, or the desires of one of the parties to the agreement. What witness has read here are only broad principles. Perhaps very few divisional arrangements that are very large in scope or in their territory would conform strictly to those rules; but if they deviated to any marked extent, then that set of divisions would not bear the common characteristics of the general run of divisions. When two men sit down to make divisions, it would be possible for one to get rather
1238 the better of the other by making larger groups on his railroad than the other man did on his. It would be possible for him to get the better of the other by making groups so arranged that his heavy tonnage towns were situated near the inner line of the group. If one could induce the other to consent to a rather large constructive mileage to be applied to the group, that would result in one man getting the better of the other. It takes exactly those two factors, the group and the mileage, to determine the per cent. The per cent, in turn, determines the amount of revenue that each carrier would derive; so, as the one is affected, the result applies directly to the item of money in the settlement of the joint freight charge.

Asked to tell what he did in the line of this investigation, witness said:

"Prior to the presentation by the New England lines of certain exhibits setting forth the grouping and mileage of those routes, we had inaugurated such an investigation on our own behalf in Chicago. It was under way at the time the New England roads presented their exhibits. We continued our original line of effort and completed the investigation, to show the size of the New England groups, the

territory included by them, and the prorating mileage used in the present day percentages or divisions. We confined our efforts
1239 to three groups of New England carriers, or rather three New England carriers, the New Haven road, the Boston & Maine Road, and the Maine Central. For each of these roads a map was prepared, showing the existing grouping and the existing mileage via the three principal gateways, the Harlem River gateway, Maybrook or Campbell Hall, and the Rotterdam Junction or West Albany gateway. Our efforts in that direction speak for themselves, and can perhaps be best set forth by the presentation of the maps. These maps, being a set of three sheets, were received in evidence marked "Defendants' Exhibit No. 152, witness Bradley."

Witness' map was drawn to cover the entire groups and it indicates that to the farthest point in the group, the prorating mileage exceeds the actual mileage very materially. For example, taking the extreme point shown on the map, Provincetown, the actual mileage from that point to Harlem River is, as indicated, 299 miles. The prorating mileage is 393 miles, showing an inflation in the mileage of 94 miles to the extreme point in the group. By tracing this back, and following the green line, we find that the mileage to the inner side of the group, that is, the side closest to the junction point, at which they receive the freight, for example, at Provincetown, is 181 miles. That shows an inflation of over 100 per cent in the mileage. On the extreme north of this group is Fitchburg. The actual mileage there is 197 miles, showing an inflation of almost 200 miles, a little over 100 per cent.

1240 Now, take the next group here, which is indicated in blue. The distance upon which existing percentages are based is 282 miles. That is the Hartford group. As near as witness can see readily, the maximum distance at one point indicated on the map in that group would be about 193 miles. That is the mileage at a town called Norwood, just southwest of Boston. Norwood itself is in the Boston group, but Walpole, adjoining there, is in the Hartford group. Toward the west we appear to get into a number of important cities, and run down to this point previously mentioned, Greenwich, which is but 23 miles from Harlem River, but receives a prorate based on 282 miles.

The Boston group appears to be split up. Witness cannot account for it. This group covers a limited territory in the vicinity of Boston, and then jumps clear over to the other side of the State and covers the same territory. The mileage allowed is 332 miles. The maximum distance appears to be Boston, 207 miles, and in the group on the other side of the State it would be, up at Turners Falls, 165 miles. This Boston group, in the west side of the State, appears to have an inflation running from 100 per cent upward. The minimum distance in that group appears to be at Danbury, which is an important manufacturing town. The distance from Dan-
1241 bury to Harlem River is 60 miles. On that 60 miles they get the Boston prorating mileage of 332 miles. On the Rotterdam Junction sheet the distance to Newport should be 294 miles instead of 220 miles. St. Johnsbury should be 251 instead of 289.

Wells River should be 230 instead of 268. White River Junction should be 190 instead of 228. Claremont Junction should be 168 instead of 206. Brattleboro should be 127 instead of 165. Another map, relating to the Boston and Maine Railroad, was received in evidence, marked "Defendants' Exhibit No. 153, Witness Bradley."

Substantially the same situation obtains on the Boston & Maine with regard to the size of the groups, constructive mileages, and so forth, particularly to the heavy tonnage towns, except that on the Boston & Maine there seem to be more groups, and witness would say that the inflation, by which he means the difference between the prorating mileage and the actual mileage, is not quite so marked.

The first group shown is the Portland group. The prorating distance is 320 miles via Rotterdam Junction. The actual distance to Portland is 281 miles. That group carries down to points approximately 190 miles from Rotterdam Junction. The Portland group apparently, starts just east of Lowell, which is 189 miles.

The next group is the Concord group. The prorating mileage is 359 miles. The extreme point shown on the map is apparently Cumberland Mills, 316 miles. It carries down to 141 miles at Keene, N. H., and 122 miles at Northampton, Massachusetts. Witness would say from a geographical standpoint that Manchester, New Hampshire, which is about the center of the group, with a mileage of 208 miles, would indicate approximately the average actual mileage to that group.

1242 The next group is St. Johnsbury, with a prorating mileage of 437 miles. About the extreme point in that group is shown as Shelby Junction, where the actual mileage is 372 miles. The center of the group appears to be about Wells River, where the actual mileage is 268 miles.

The next is the Windsor group, with a prorating mileage of 268 miles. The maximum distance there indicated is 228 miles, and runs down to Greenfield, 103 miles. It must be borne in mind that where prorating groups cross, as in the case of Greenfield, the percentage prevailing is not always the percentage shown in the higher group. Witness would say in that particular instance that Greenfield comes in the Boston group, which is 212 miles. The next is the Boston group, with a prorating mileage of 212 miles. The maximum point there is in the vicinity of Boston, which is 209 miles, and runs down to Rotterdam Junction. The minimum mileage in that group is at North Adams, 67 miles, actual.

The size of the groups, the prorating mileage, and the actual mileage, vary, according to the gateway used.

Boston, on the Boston & Maine, is in the Boston group, via Rotterdam Junction, and the prorating mileage is 212 miles. On that particular division of the B. & M., immediately outside of Boston, it would be in the Concord group.

These exhibits are representative as applying from all points in C. F. A. territory, & give what witness considers a fair picture of the New England grouping. Another map relating to the Maine Central, was received in evidence, marked "Defendants' Exhibit No. 154, Witness Bradley."

Witness has prepared similar information with respect to
1243 the Central Freight Association grouping.

The paper referred to was received in evidence and marked Defendants' Exhibit No. 155, Witness Bradley.

Asked to proceed with any comment he has to make on that exhibit, the witness said:

"This exhibit is a series of four maps showing the grouping and mileage accepted by the Central Freight Association lines in connection with New England percentages via the gateways referred to, Harlem River, West Albany, Rotterdam Junction, and Maybrook. In presenting these, I would like to refer to the comment I made night before last, that while the New England lines had presented a rather complete picture of their situation from the standpoint of mileage and grouping, they had failed to do so from the standpoint of the C. F. A. lines. Without that, no picture can be obtained as to the true relation of the percentages accruing, respectively, to the two groups of roads. We felt that it was necessary to supply the information, and for that reason these maps are presented.

"The showing in these maps is quite the contrary from the showing obtained by an examination of the New England maps. This runs in two different things, first, that the C. F. A. roads' groupings are very much smaller, and that they adhere very closely to the actual mileage. I think the maps are fully explanatory. It
1244 is only necessary to call attention to a few things to illustrate this difference.

"Starting at St. Louis, and by the use of brown pencil, the situation for the Clover Leaf Road from that point to Toledo is indicated. By the use of a short cross mark, the extent of the group is indicated, which, on the Clover Leaf, is at Brockton, Ill. That is the so-called St. Louis group of the Clover Leaf.

"Let us look at Brockton and locate it for everybody, Mr. Bills. Brockton is pretty close to the Indiana State Line. There are two figures shown in connection with each block and each railroad. In this instance the figure is in the same color as that used in showing the road, namely, brown. The figure prefixed with P is the prorating mileage and the figure prefixed with A is the actual mileage. In that case the Clover Leaf road accepts on its St. Louis group a 432-mile prorate, while its actual is 451 miles.

"I referred to the fact that sometimes, for competitive reasons, long lines were compelled to shrink their distance to compete with the short line. This is an instance of that sort, the Clover Leaf accepting the Wabash distance between St. Louis and Toledo.

"The next group on the Clover Leaf, commencing just east of Brockton, runs up to but not including Marion, Ind.
1245 Marion is pretty close to the Indiana-Ohio state line. In that block the prorating and the actual mileage is the same, 298 miles.

"From Marion, Ind., into Toledo, covering the balance of the

Clover Leaf road, the actual and the prorating mileage is the same, 154 miles.

"As compared with the corresponding inflation in mileage in the large groups in New England I should say that the Clover Leaf gets the worst of the bargain.

"Take the red line running out of St. Louis; that is colored up to illustrate the situation on the Big Four road from St. Louis to Cleveland. That is via Indianapolis. Their St. Louis group breaks just west of Terre Haute, Ind., Terre Haute being just over the Indiana-Illinois boundary. Their prorating distance from St. Louis to Cleveland is 545 miles; their actual distance is 533, the difference being due to the building of a cut-off at Hillsboro, Ill., eight or ten years ago, while, as I understand it, these divisions were established a long while ago, and their actual distance from St. Louis to Cleveland is 545 miles.

"The next group on the Big Four runs from Terre Haute to Indianapolis. That is a distance, I think, of about 70 miles. Their prorating distance is 451 miles, and the actual is 335.

1246 "Now, in that instance they obtain an excess mileage of about 100 miles.

"At Indianapolis, and running to but not including Winchester, Ind., the Big Four has another group of which their prorating mileage is 283 miles and their actual 284. That is a short group, only about 40 miles in length.

"The next group starts at Winchester and runs over to but not including Bellefontaine, Ohio; prorating mileage 246, actual, 243.

"The next group runs from Bellefontaine to Marion; that is a short distance in there, 26 miles. The prorating is 190 miles, and their actual is 164. The reason for that is, apparently, I should say, from the looks of the map, that they run that group on down south to Springfield, which is also in the 190-mile prorating group, with an actual mileage of 164 miles.

"The next group runs from Marion, Ohio,—I think we all know where that is—into Cleveland, with a prorating mileage of 164 miles and an actual of 138 miles.

"Now we leave St. Louis for a minute and take up the situation at Chicago. Take the Pennsylvania; that is shown in blue. At Chicago they accept 468 miles as a prorating basis; their actual is 468. That group runs down to but not including Ft. Wayne, Ind.

1247 "The next group runs from Ft. Wayne to but not including Lima, Ohio, where the actual and prorating mileage is the same. That is a short group in there, being about 60 miles.

"From Lima to Forest is the next group, which is very short; actual and prorating the same.

"Forest to Crestline is the next group, 230 miles; prorating and actual are the same.

"The next group is a very short one; actual and prorating the same.

"From Mansfield into Pittsburgh they have one group; the prorating and actual mileage is the same.

"Now, we have here six groups covering 468 miles of line. That is less than 70 miles to the group.

"The situation on the Nickel Plate road is illustrated by the green line. They start out at Chicago and prorate on 524 miles as against actual of 523. That group runs down to but not including Claypool.

"The next group runs over to but not including Mortimer, Ohio; 410 actual, same prorating.

"The next group carries it to but not including Cleveland. They prorate on 292 miles and their actual is 293.

"At Cleveland they have one group into Buffalo. Their prorating mileage is one mile less than their actual. They probably met the short line; I don't know whether the New York Central is
1248 shorter between Cleveland and Buffalo or not. If it is, that would probably account for that one-mile difference.

"In Michigan the situation is this:While the groups are small, there is an inflation in mileage. That inflation is found in the territory west of Detroit and Port Huron. Let us take the situation at those two points first.

"Detroit prorates on 295 miles and their actual is 246. Port Huron prorates on 270; their actual is 235. There is not very much of an inflation there. However, after we leave those points and start west we find an inflation. The inflations are set forth on the map. The showing of the New England roads in the exhibits submitted is entirely silent on this situation. It is a fact, and we are perfectly willing to let it go before the Commission so that they will understand it.

"Now, it is my view—and I have had something to do with these Michigan rates for 10 years—that the inflation in mileage and the consequent inflation in percentages is due to the fact that a higher rate basis is carried from Michigan into trunk line and to New England territory than into territory south. That case has been before the Commission in the Michigan Percentage Case, and fully set forth, and the Commission found on account of the cir-
1249 cumstances and conditions in Michigan that the rates might well be higher from that section of the country than from the balance of C. F. A. territory. In that case the Commission cut us down a little, but we are still higher, mile for mile, than the territory south of us, and it is my view that the rate situation accounts for the inflation in the mileage."

When witness says "actual mileage," he means the distance over the route indicated. Generally the distance over the route indicated to those Michigan points would actually be the short line mileage. They are the mileage-making routes.

Witness thinks he has failed to indicate what junctions the prorating of the actual mileage refers to on these maps. They refer, for the haul indicated on the map, in the case of the distances of the Pennsylvania that witness has talked about, to the distance from Chicago, and so forth, to Pittsburgh. The distance of the Nickel

Plate is from Chicago to Buffalo; the Clover Leaf, from St. Louis to Toledo.

The other three sheets of this exhibit carry about the same information for the other routes.

As between the individual roads in Central Freight Association territory, they generally fare the same on their divisions with the New England lines. There is a substantial similarity in the size of the groups and in respect to their prorating mileages compared with their actual mileage. C. F. A. Territory prorates on
1250 actual, and their groups are reasonable.

The Michigan lines vary only in respect to the mileage. The groups are small and reasonable. The variation in the mileage does make a considerable variation in the respective divisions, but it does not begin to equal the results secured by the New England lines by their greater inflation of mileage and their larger groups.

In a slight degree the Michigan lines have come nearer holding their own with New England than the lines south of Michigan. Throughout Central Freight Association territory the groups are much smaller than the New England groups. Where constructive mileage appears it is much less in volume and size than the New England constructive mileages. Outside of Michigan there is no constructive mileage in C. F. A. territory.

The principal tonnage towns in C. F. A. prorate on a mileage very much closer to their actual mileage than the principal tonnage towns in New England. That is quite marked, because the principal towns in C. F. A. territory mark the western boundary of the group. By the other operation of putting the principal towns in the eastern boundary of the group, or the inner circle, you obtain just the other result. It would produce a mileage that is
1251 greatly in excess of the actual mileage.

Witness has prepared an exhibit indicating the situation from point to point with regard to divisions between New England and Central Freight Association territory.

The statement referred to was received in evidence and marked Defendants' Exhibit No. 156, Witness Bradley.

Asked to state just what this exhibit shows, the witness said:

"The first exhibit illustrates the situation from Pennsylvania stations west of Pittsburgh to the New England territory via Harlem River. It is not a complete illustration of the entire situation of the Pennsylvania, but is confined to the few points indicated. Those points, by the way, are those used by the New England lines when they set up the grouping and mileage for C. F. A. roads.

"The first shows the existing divisions; arbitrary deductions, if any, before prorating; the basis for the existing divisions; the actual mileages; what the divisions would be if actual mileages were employed; what they would be if actual mileage plus 20 miles for each terminal was employed, and what they would be if actual mileage plus 50 miles for each terminal line were employed.

"In other words, we have four tests. We have the existing divi-

sions, then the mileage test, mileage plus 20, and mileage
1252 plus 50.

"In explanation of the 20-mile factor, we simply put it in to test the situation out in our own mind, and used that because it was a figure employed by the Railroad Administration quite frequently. The 50-mile addition was made as representing perhaps the maximum arbitrary allowance which any road could claim to cover their terminal conditions, expenses, and so forth.

"This exhibit connects up the two previous sets of exhibits, that is, the maps. On the maps are indicated the prorating mileages. They do not mean anything until one is associated with the other and reduced to percentage. The purpose of this and subsequent exhibits is to connect up the details and show what the mileages are converted into percentages.

"The first page will represent the situation from Chicago. In order to get a proper picture we have taken the long point in the New England group and the short point in the New England group. The illustration there shows Boston as the long point and Norwalk, Conn., as the short point.

"To Boston the New Haven road prorates on 332 miles. Its percentage is 26½ per cent. Its actual distance is 219 miles, and its percentage on that basis would be 19.6.

"To Norwalk, Conn., the short point, the prevailing per
1253 cent is the same as to Boston, 26.5; its mileage is 50 miles, and its prorate based on that would be 5.3. In that instance (speaking now of Norwalk, Conn.) the New Haven road receives over six times its actual mileage. That is on a short haul. I do not want to be understood as stating that the New Haven road under ordinary, fair practice would be expected to take 50 miles in a prorate in connection with a shipment that travels 1,200 miles. There would be nothing fair about that. But in the form of exhibit we have used we have included the maximum and minimum. In between those two somewhere rests a fair percentage for the entire group."

Taking witness' first instance of the Boston group, the Pennsylvania lines west now receive 37.4 per cent., and would receive, under a mileage prorate, 41.9 per cent.; and the Pennsylvania lines east 36.1 per cent.; and if they had a straight mileage prorate they would get 38.5 per cent.

By the use of the mileage factor plus 20 for the terminal lines the New Haven would receive 20.6 on Boston; on Norwalk, 7.1; and the proportions of the Pennsylvania lines east and the lines west would be affected accordingly. Using the 50-mile additional factor, the New Haven would receive 22.1 per cent. on Boston, and 9.6 per cent. on Norwalk. The effect of substituting a mileage prorate for the present arrangement would be a very marked reduction in the New England lines' proportion, and a like increase in the
1254 proportions of the trunk lines and C. F. A. roads.

A paper was received in evidence and marked Defendants' Exhibit 157, Witness Bradley.

Concerning this, the witness said:

"Let me just add there—and it runs to the whole showing in this case—that it is far from a complete showing. This exhibit on the New York Central lines deals with but a few points. A complete showing for the New York Central Lines west of Buffalo would require a tabulation 20 times that big."

Additional statements were received in evidence and marked Defendants' Exhibits Nos. 158, 159, 160, 161, 162, 163 and 164, Witness Bradley.

The witness continued:

"In connection with Exhibit 164 I would like to explain that it merely summarizes the scope of the investigation in the previous exhibits, and shows the points in C. F. A. territory, the territory in New England, and the routes or gateways that were included in the analysis covered by the previous eight exhibits."

In a mass of figures of that kind it is very difficult to get a general view of how the situation as a whole runs as between New England and C. F. A., with regard to the question of the division of rates.

1255 Asked whether he had made any attempt along that line to put in at least a partial picture of it, the witness said:

"Yes. I have something here that is just a kind of bird's eye view, that we drew up for the purpose of fixing in our own mind what all of these things showed; first, whether it indicated that the New England lines are getting a fair showing under present divisions, and, if they are, whether they are getting more than a fair division of the rate. In order to reduce that to a point where we could assimilate it mentally, we prepared a little graphic chart which does not run to the entire situation, but only applies to the question of divisions between the Pennsylvania Lines west of Pittsburg and the New Haven Railroad."

The paper referred to was received in evidence and marked Defendants' Exhibit No. 165, Witness Bradley.

Asked what that little diagram means, the witness said:

"This exhibit shows, to the extent of the territory included in the exhibit, two things: the present percentage and a percentage based on actual mileage, and uses for that purpose the six points in C. F. A. territory that were included in the main exhibits of the New England lines, presumably as being representative, namely, Chicago, Indianapolis, Cincinnati, East S. Louis, Grand Rapids and Cleveland. As corresponding with those we have selected six

1256 points on the New Haven road, namely, Boston, Providence, Bridgeport, Hartford, Worcester and Springfield.

"While we were governed by the complainants' selection of C. F. A. points, we made our own selection of the New England points to

correspond. We did our best to pick points that were representative, geographically and in point of tonnage.

"The chart shows by the use of the flat colors the division of any rate between the New Haven and the Pennsylvania under existing percentages. It shows an average percentage for the New Haven road of 25.9 per cent., an average percentage for the Pennsylvania System West of 34.4 per cent., and an average percentage for the Pennsylvania East of 39.7 per cent.

"The situation with respect to present percentages is indicated by the colored blocks in this diagram.

"Now, taking up the other angle, a mileage prorate, that is indicated by lines drawn through the mileage blocks. For example, on the New Haven Railroad the present proportion accruing to that line is the solid blue. That block is defined or outlined by a fine black line. Now, if they were to accept actual mileage, that dividing line would swing over. You will find there a yellow line, and that represents how the yellow block representing the
1257 Pennsylvania Lines West would be enlarged and would run over from the point 'O' in the circle to about 95½. The red line drawn through the solid blue field indicates how it would be swung over on an actual mileage prorate for the Pennsylvania Lines East. In that case the pink block would be extended from a point about 74 to a point about 80, and the block of the New Haven which is now represented in blue would be contracted to the extent indicated by the two colored lines previously referred to, the yellow line and the pink line.

"Reduced to other terms, this chart indicates that the New Haven Railroad receives about 65 per cent. more than it would receive based on actual mileage prorate. In other words, it receives now 25.9, and would receive 15.7."

Witness absolutely does not present that as a complete picture of the situation as between C. F. A. and New England.

Witness has prepared an exhibit indicating the percentages road to road instead of group to group.

The paper was received in evidence and marked Defendants' Exhibit 166, Witness Bradley.

Asked to tell what that exhibit purports to show, the witness said:

"This exhibit, Mr. Examiner, runs to the theory of Eaton's Exhibit 43 and Wood's Exhibit 52, which theory I do not subscribe to, for the reasons stated when I criticized those exhibits."

1258 Witness refers to the theory of comparing the division with the local rate.

The witness continued:

"In my comments on that question I indicated how you could get any kind of result you wanted by the mere operation of comparing

different things. The real test is to compare the same things, the same haul with the same haul.

"This Exhibit 166 assumes for that purpose to take certain sections of roads in C. F. A. territory—and they have been scattered all over the territory—and compare them with similar sections of roads in New England. The sheets are built up on the following principle:

"Sheet 1 represents the situation on the Michigan Central Railroad as compared with stations on the Boston & Maine and Maine Central. We have taken there the line of the Michigan Central extending from Detroit, Mich., to Grand Rapids, Detroit being 229 miles from Buffalo, the gateway point, and Grand Rapids 398 miles. There we have 169 miles of Michigan Central Railroad. As against that we compare the Boston & Maine, and then on out on the Maine Central starting at Dover, N. H., and running it to Belfast, Me. There is a distance of 173 miles—a corresponding distance.

"This exhibit is semi-graphic. We compare Detroit, Mich.,
1259 with Dover, N. H.; and you will observe as you go along that these roads have been divided up respectively into 50-mile blocks. At Detroit the Michigan Central has a haul of 229 miles and the B. & M. has 237. The prorating mileage of the Michigan Central is 295 miles, and of the Boston & Maine 320 miles.

"Now, from there on the Illustration has to do with the theory advanced by the New England lines that there ought to be some kind of an association or relation between what they get on the through traffic and the level of their local rates.

"For the same number of miles of haul the Michigan Central obtains at this time 32.9 per cent., first taking out a one cent terminal for the eastern line; the New England road obtains 36.6 per cent. plus this same terminal. This is the result: The Michigan Central earns 42.4 cents and the New England lines earn 46.9 cents. Now, carrying out their theory that there ought to be some relation, we find this: that 42.4 cents as compared with the local rate for that distance represents 50.18 per cent. for the Michigan Central, while the corresponding situation on the B. & M. is that they obtain 56.85 per cent.

"Let me add that we did not attempt to make this showing com-
plete for all of the roads. It was too big. It would have
1260 taken too much of a study, and lumber up the records too much. We have picked here and there in C. F. A. territory sufficient mileage to match a given number of miles in New England and worked it out to see what the theory results in.

"Now let us take the Big Four road. That is the fifth page in this exhibit.

"This represents the situation on the Big Four road from Cleveland, Ohio, to Cincinnati, a distance of 243 miles, and matches it with a haul of the Central New England and New Haven roads for 246 miles. This, too, has been blocked out in 50-mile blocks, and the comparison is between the blocks spotted opposite each other; that is, on the Big Four the block at the top, and on the New Haven road the block immediately below and corresponding to that.

"On the Big Four we have New London, Ohio, with an actual mileage of 48 and a prorating mileage of 164, and a per cent. of

15.4. On the New Haven, with an actual mileage of 40—just how their prorating mileage is made we do not know, so we have shown the word "arbitrary" in there—their percentage is 27.9, which is 12½ per cent. more than the Big Four. Now, when we compare the revenue results that each road receives from the operation of those percentages, we have this:

1261 "The local rate of the Big Four is 51 cents, first class; the local rate of the New Haven is 51 cents. The Big Four earns 19.5 cents; the New Haven earns 35.3 cents. The Big Four earns 38 plus per cent of its local, and the New Haven earns 69 plus per cent."

This exhibit tends, in witness' opinion, to support the proposition that he formerly made, that if C. F. A. divisions are compared to C. F. A. local rates on comparable hauls, and the same iomparison made in New England, it would indicate that the C. F. A. lines were not nearly as well off on their divisions as the New England.

The witness continued:

"That is an absolute and inevitable result when you bear in mind that the C. F. A. lines prorate on actual mileage and short groups and the New England lines prorate on an inflated mileage and large groups. Now, the only possible difference that mathematically could arise in comparison of the level of the local rates of these two groups, New England and C. F. A., would be that which is represented by the difference in their local scales. The maximum of that would be 10 per cent in favor of the New England line, in view of the fact that their scale of rates in that territory is 10 per cent higher than the C. F. A. scale.

1262 "In order to illustrate that just briefly, suppose the basis for dividing rates was an actual mileage prorate; the New England line took one mile and the C. F. A. line took one mile. Now, if you were to attempt to associate that mile and modify it so as to reflect the influence of the level of local rates, what would you have? You would have one mile of haul on the C. F. A. as compared with their scale, which we will say was 100 per cent; in New England you would have one mile of haul compared with their scale, which we will say is 110 per cent, because their scale is 10 per cent higher. Now, that would be the true relation of local rates to divisions if mileage was employed in both cases."

When witness speaks of the C. F. A. scale, he is not referring to the Michigan situation. He is speaking of the C. F. A. lines He thinks there are sufficient illustrations there, and they have been spotted all over C. F. A. territory, to show why he does not subscribe to the theory advanced by the New England lines that, as compared with their locals, they are not faring as they should.

When Witness says that the New England local rate is 10 per cent higher than the C. F. A. rate, he is referring to the Anderson scale. The actual local rate in New England is, generally speaking, somewhat lower than the Anderson scale.

Witness has not made any study to determine on an average how much lower it is. He could not say. He understands that
1263 generally the Anderson scale does not apply as far west as the Hudson River. He thinks it has been explained in the record why it does not. So, in respect to the actual local rates to the points in question, which would be the junction points between Trunk Line and New England, they generally have a situation where their local rates are less than they would be if the Anderson scale was in full effect.

Witness' Exhibits 128 and 129 show in each case the Anderson scale and the actual rate.

If witness was to make some comprehensive change in divisions as between New England and C. F. A., and wanted to determine what the present situation is, getting a real view of it, so that he really knew what the present situation is between New England and C. F. A., he would have to have one of two things. He would have to have the entire and complete percentage system before him, and in determining whether it was fair or otherwis, as a traffic man, he would constantly have in mind the relative importance of a point or group from the standpoint of tonnage involved; or, if he did not have that, he would have to have some information as to how each carrier fared from the standpoint of its earnings per ton mile on that traffic.

Witness has looked over pretty thoroughly the traffic testimony that was put in by the New England lines, not in full, but he
1264 has kept a run of the thing. He could not, from that testimony, derive a starting point from which to change divisions, if he wanted to. Any showing that purports to set up the situation for the Pennsylvania Lines west of Pittsburgh, between Pittsburgh and Chicago, and only takes into account one point, is very far short of the necessary information to enable any man to determine anything about the percentage system between the New England roads and the Pennsylvania lines.

Witness makes no claim that he has completed that showing by the exhibits that he has put in today.

Asked what conclusion do these independent studies that he has made, and so forth, of the division relation between New England and Central Freight Association raise in his mind as the probable situation as to advantage between New England and Central Freight Association territory, in regard to divisions, the witness said:

"Well, judged by all the standards with which I am familiar and which traffic men have accepted for 25 years as being the proper standard for measuring such a thing, the existing divisions are more than fair to the New England roads. In fact, they are unusually liberal."

Witness had nothing to do with the making of these divisions with the New England roads. They have been in effect,
1265 witness understands, for a great many years. He does not know what considerations were taken into accoun: entirely

when they made these divisions. He does not know how much the strategic position of the New England roads to play one competitor off against another may have enabled them to take an unfair advantage of their western connections. He does not know just what considerations entered into it. It is quite evident to his mind that there were some considerations; otherwise they would not have been able to obtain the best of the other roads in their divisions. That tendency or that fact is evident in all the divisional arrangements that witness has examined in connection with the case. It is present in every one of them. Just how it was accomplished witness does not know, unless it is merely holding true to the tradition that credits to that part of the United States peculiar ability on the part of their citizens to take care of themselves in a bargain.

Witness has a map showing what the rate structure is in Michigan, the zones.

The map referred to was received in evidence and marked Defendants' Exhibit No. 167, Witness Bradley.

They have in effect in the State of Michigan a higher level of rates than generally in effect throughout Central Freight Association territory. That higher level of rates applies to class rate traffic.

Witness will put in a table showing these scales that are in effect in Michigan.

The paper referred to was received in evidence and marked Defendants' Exhibit 168, Witness Bradley.

The witness continued:

"In connection with Exhibits 167 and 168, these exhibits show this: that we have four zones in the State of Michigan for application upon interstate traffic—Zones A, B, C and D. Exhibit 168 is the mileage table, and it shows the rates for these four zones. The Zone A rate is the base rate applicable generally throughout Central Freight Association territory. It applies in a limited part of the southern peninsula of Michigan, on and south of the main line of the Michigan Central from Detroit to Chicago. In Zone B we have a higher level.

"Exhibit 167 has a little tabulation pasted on the upper left hand corner, and it shows what that level is as compared with the base rate.

"Zone B rates today are four cents on first class down to one cent on sixth class over the base rate, Zone A.

"Zone C, first class, is 11 cents and sixth class is 3 cents over Zone A, and Zone D is 13½ cents, first class, and three and one-half cents, sixth class, over Zone A.

"Those three zones, respectively, represent the added volume of freight rate that we have put into our Michigan rate structure in connection with C. F. A. class rates, as compared with the flat or zone A class rate scale which is applicable throughout the entire territory.

"We also have a practically similar higher basis of rates for application in Michigan on intrastate traffic. The zones are some what different, and the difference between the base rate and the zone rates is very little; but in general effect the two are the same."

Zone B of these Michigan zones was the original source of the Anderson scale, so-called. Witness understands the original figures of the Anderson scale correspond exactly with his Zone B. Witness has an exhibit indicating whether or not the Michigan roads get the entire benefit of this higher level of rates that they carry in Michigan.

The exhibit referred to was received in evidence and marked Defendants' Exhibit 169, Witness Bradley.

The witness continued:

"As a condition of the higher rate levels in Michigan, it was agreed that the difference between the flat and base rate and the actual rate employed would accrue separately to the Michigan roads in addition to the prorate based on the established per cent.
1268 This point was made a great deal of at the hearing in the Central Freight Association class rate case, and it was pointed out by the shippers that, unless the added compensation accrued entirely to the Michigan railroads, they, the shippers, would not receive the benefit of the higher scale of rates in the way of better service, better railroads and equipment.

"It was agreed at that time by all concerned, and it was so recorded in the Commission's decision in the case, that the plus or difference in the rates would accrue to the Michigan railroads."

Witness has an exhibit indicating whether or not the Michigan roads have actually in effect this higher scale of rates as compared with what they would have if they were going under the C. F. A. scale.

The exhibit referred to was received in evidence and marked Defendants' Exhibit 170, Witness Bradley.

The witness continued:

"This is an extract from the tarrif-s, and is put in the record for the purpose of illustrating that, unlike the New England situation, we have put into full effect the higher scale of rates in the Michigan zones, territories B, C and D.

"It shows, for example, that from Grand Rapids, Mich., to Detroit, Mich., the actual rate, which is prefixed 'A,' is 76½ cents.
1269 If, however, we used the C. F. A. level of rates, it would be 73 cents.

"From Grand Rapids, Mich., to Pittsburgh, Pa., the actual rate is $1.05. The flat scale would be $1.01.

From Cadillac to Pittsburgh the rate in effect is $1.19½. The application of the flat C. F. A. scale would be 98½ cents. The actual difference there is 21½ cents.

"I want to call particular attention to the fact that when we had

this problem confronting us in Michigan and attempted to remedy it by putting into the rates the things which we claim to represent our operating and traffic difficulties in the State of Michigan, we carried that adjustment over the borders of Michigan wherever it was necessary. This indicates that the adjustment has been carried to the west bank of Lake Michigan at Milwaukee and Green Bay.

"Now, those points are important basing points for making through rates. They are rate-breaking points, and combinations of the locals, into and out of, reflect a through rate, and to the extent that the higher basis of rates is employed at Green Bay and at Milwaukee and at Menominee it not only applies the higher level of rates to those points on traffic from and to them locally, but is reflected in the through rate on traffic originating or going beyond, up in Wisconsin and Minnesota and the upper peninsula of Michigan."

1270 This higher scale of rates applying to and from points in Michigan affects the rates, say, from Zones B and C in Michigan to points in the South.

The witness continued:

"The general scheme of rates we have in Michigan, that I am referring to here, applies all over Central Freight Association territory, which is ths territory north of the Ohio River, east of the Mississippi River and west of the Pittsburgh-Buffalo line.

"In the case of a through rate on automobiles from Flint, Mich., which is in Zone B, destined to any point south of the Ohio River or west of the Mississippi River, that is not covered by a through rate, the influence of this higher level of rates in Michigan is felt. A shipment from Flint to Atlanta carries this penalty charge. A shipment of furniture from Grand Rapids to Denver carries it. A shipment of hay—of which there is a great deal—from Michigan going into Carolina territory carries this same plus basis.

"With the exception of a comparatively limited section of the United States to which we have through rates, which would be transcontinental points, Texas and a few points in what is known as Mississippi Valley prorating territory, this higher basis of
1271 rates applies on all traffic into and out of Michigan from and to the entire United States from the Atlantic Ocean to the Pacific Ocean.

"Now, in addition to that, I want to direct to the attention of all concerned the fact that, while we have through rates between Michigan and Trunk Line and New England territory, we there have a higher basis of rates than is in effect in the balance of Central Freight Association territory. That was dealt with in full detail in the Michigan percentage case, 47 I. C. C., 409.

"This higher scale of rates applies to and from Michigan to all points in Central Freight Association territory that I have referred to."

The New York rate to points in Central Freight Association territory is carried up into New England as to westbound traffic. The

rate from Detroit to New York is not extended to other points in Michigan, such as Flint, which compete with Detroit. There is a higher basis from those points to New York than from Detroit.

As a matter of additional information, as illustrating the Michigan situation and their attempts to help themselves up there, there is another important set of rates that witness has not referred to, and that is the coal rates. There are millions of tons of coal shipped
1272 from the mines of Ohio, Pittsburgh, West Virginia and Kentucky into Michigan. That situation has been before the Commission in a case known, witness believes, as Coal Rates in Official Classification Territory. It was within the last three years. Complaint was made, and witness believes it was shown that mile for mile the rates on coal generally into Michigan were higher. That is, taking the situation as represented by coal traveling from the South into Michigan, through the Toledo gateway, the rate was higher 50 miles north of Michigan than 50 miles south of Michigan. The Commission required some very slight adjustment in the rates; but the relatively higher basis of rates on that commodity mile for mile is in effect today. That is reflected in the divisions and is allowed to the Michigan railroads north of Toledo. The Detroit rate is not carried to Lansing or to any of the other large automobile manufacturing centers of Michigan.

Furthermore, taking another important industry in Michigan, the furniture industry, Grand Rapids, witness thinks, is one of the principal furniture manufacturing towns in the United States. It takes 92 per cent. of the Chicago-New York rate. At Cadillac, on the Ann Arbor, also reached by the G. R. & I., 95 miles north of Grand Rapids, there are several very large furniture factories. Cadillac takes the 108 per cent. basis, as witness recalls it. Grand
1273 Rapids takes the 92 per cent basis.

Cross-examination:

Witness has been connected with the Ann Arbor Railroad 10 years, and prior to that time with the Wheeling & Lake Erie for about 4 years. He has been connected with railroads in Central Freight Association territory a little over 20 years. He thinks these New England divisions were generally established before his time. They must have been established many years before these zones were established in the State of Michigan.

Before the zone system of rates was established in the State of Michigan, the divisions, so far as Michigan roads were concerned, had recognized constructive mileage for the Michigan roads. The constructive mileage had been employed in making the divisions long before witness' time. When the zone system was put in effect in Michigan for application of rates between Michigan and the Central Freight Association territory, there was no revision of the percentages.

Asked how they realized the increased rate when the rate was made to territory outside of Central Freight Association territory, the witness said:

"Well, wherever the combination of locals was used, as an illustration that shipment going to Atlanta, which I mentioned, it
1274 automatically was reflected in our divisions."

Where they did not use a combination of locals, there is no change. For instance, to transcontinental territory, that was not influenced one way or the other. These increases in Michigan were reflected in the present divisions, by reason of the reduction and addition to the Michigan lines' proportion of the difference between the base rate and the actual rate. That was by agreement with the C. F. A. lines, and by condition when the rate was put in. This agreement does not operate outside of C. F. A. territory. Those were the only rates that were under consideration. What resulted was that when they got these higher rates in Michigan, resulting from dividing it into zones, through agreement with other carriers in Central Freight Association territory, they did get their increase reflected in their divisions with them. It was a readjustment of divisions within Central Freight Association territory.

So far as the percentages are concerned, they are today what they were 5 or 10 years ago, before this zone system was put in effect. The revenue of the Michigan railroads was increased in exact ratio by the amount of added rate put into the rate structure; but the percentage is unchanged.

After the zone system was put in effect, the rate was increased to the shipper, and to the extent that the Michigan line obtained
1275 more than would be yielded by the percentage known as the agreed percentage, that was collected from the shipper or the consignee. The additional revenue in the State of Michigan, as representing defendants' less favorable operating conditions, has been put into the rate and paid by the public and retained by the Michigan railroads. They take it out on the same principle that they take out an arbitrary. If that same principle were applied to New England, when the Anderson scale was put in effect in New England, it would have justified an increase in the through rate, say, between Boston and Chicago, and the New England lines taking out, just as they would have an arbitrary, the increase that the Anderson scale granted them, over and above the base rate. That principle has been recognized and approved by the Commission.

When witness made his comparison in Exhibit 166 between the percentage of the local rate which they got from their divisions in Central Freight Association territory, and the percentage of their local rate which the New England lines got, he did not use the Anderson scale in the case of the New England lines. But he compared it with the local rate in the tariff today. If he had used the Anderson scale in figuring the percentage of the New England lines, it would not have shown a very different result. It would have
1276 shown some slightly different result. It would not have shown the result reflected in Mr. Eaton's and Mr. Wood's exhibits, for they did not use the local at all. They used the Anderson scale. The difference between Exhibit 166 and Mr. Eaton's and Mr. Wood's exhibits with respect to certain comparisons is that they

compare their division with the Anderson scale, and witness makes a comparison between their division and their local rate. Witness does not think that either the New England exhibit or this exhibit he has put in shows anything on the percentages.

Witness does not know anything about the history of those constructive mileages on the Michigan roads which have been in effect so long—how they happened to be granted. They have been in effect for a long while. They have not, undoubtedly, been allowed, because of the terminal character of the service that they have to perform. The thing that impressed witness, as a railroad man, in trying to find out why the prorating mileage in Michigan was so much more than their actual mileage, whereas in the rest of the territory the actual and the prorating are the same, was that the rates from Michigan into New England were on a higher level than down below.

As witness has heard the New England condition described in this case, he thinks that it has a good bit the same characteristics
1277 as the Michigan situation. Michigan is very largely an originating and distributing proposition.

In his opinion expressed today about the liberality of the New England division, witness has not, in speaking of the Central Freight Association lines, expressed himself as entirely satisfied with their divisions.

Referred to his Exhibit No. 155, the witness said that it is true, as a general proposition, that the mileage bases for divisions on the lines between Buffalo, Cleveland, Chicago, St. Louis and Indianapolis are on lines which are competing with each other. They are the principal main through lines of the Pennsylvania or the New York Central or the Nickel Plate, or the other principal roads that run east and west through that territory, and every one of those in that portion of C. F. A. territory were taking their divisions on a mileage prorate basis; whereas, in Michigan, in the peninsula north, any rate, of the line Cleveland to Chicago, or approximately that, the Michigan lines were getting in their New England divisions very much more than a mileage prorate.

With respect to these divisions in the territory south of the Cleveland-Chicago line the roads which were taking a mileage prorate were also getting a very long haul. That is true of the roads shown on the map. They are getting it principally over their main
1278 lines.

Taking the road that runs from Port Huron across to Frankfort, in the first block, there is a constructive mileage of 112 miles. In the second block there is a constructive mileage of 119 miles. Taking the road from Toledo that runs north to Frankfort, they get in their first block a constructive mileage of 105 miles in excess of actual, considerably over 100 per cent. In the second block they get 124 miles. In the third block they get 127 miles. They are getting pretty close to 100 per cent, in pretty nearly all those blocks. The first block is 45 miles long.

The actual distance to the farthest point in the first block from Toledo is 45 miles; from Toledo to the farthest point in the second block is 74 miles; from Toledo to the farthest point in the third

block is 107 miles; from Toledo to the farthest point in the fourth block is 145 miles; from Toledo to the farthest point in the fifth block is 184 miles; and from Toledo to the farthest point in the next block is 292 miles.

The Nickel Plate has a block of 183 miles from Buffalo to Cleveland. The Nickel Plate has no branch lines. That block
1279 is not as large as the comparative New England block. The comparison there is to take the block immediately adjoining the interchange point, which would be Buffalo for the Nickel Plate, and for the New England lines, for example, it would be Harlem River. The first station west of Buffalo on that Nickel Plate block might be 10 miles west of Buffalo. They would get 183 miles, which would be comparable with New Rochelle, for instance, on the New Haven road, getting the mileage of the Hartford block, or whatever block mileage it does get.

South of the Cleveland-Chicago line the blocks are pretty small, taking into consideration the long hauls. The total length of the haul is one of the things which really enters into percentages. Where lines directly connect, their groups are small, as actually reflecting the breaks in rates. The first block on the Big Four gets 138 miles, and they get a mileage of 164 miles in prorating.

On the lines south of the lakes they would adopt substantially the same system of divisions as to the competitive points, where there was a big tonnage. Witness thinks this theory had nothing to do with the size of the groups on the Pennsylvania. There is competition at every one of the cities, Cleveland, Cincinnati, Indianapolis, St. Louis, Chicago, and Grand Rapids, which witness has
1280 used as illustrations.

Witness does not know whether these same blocks and prorating distances apply to through rates south and west, as well as with New England.

Based on his experience, witness would have to say that the mileages and groupings applied in connection with New England might be different in comparison with those in Trunk Line or in Central Freight Association territory. There is practically no territory south of Central Freight Association territory with which witness' road has through percentages. The only exception to that that witness can recall is what is known as Mississippi Valley prorating territory. In the southeast there are no through divisions. The rates make on combinations. In the southwest there are no through divisions. They do not have the same divisions with roads south of the Cleveland-Chicago line, and the same groupings which they have with New England. The groupings might be a little bit different.

Witness thinks that in size of the groups, in all probability, their percentages, say, with the Pennsylvania at Toledo, would approximate the same as these blocks here. Just what mileage is accepted, he cannot answer. Probably his line does not get as large a mileage, and neither does the other fellow. Both get their actual
1281 mileage, at least. On New England traffic the Michigan roads do not get more favorable divisions than any other carriers they interchange with.

Recess until 1.40 P. M.

H. S. BRADLEY resumed the stand.

Cross-examination:

Witness has had occasion to consider in the past the movement of heavy low grade freight in C. F. A. territory, including coal, brick, and ore. Quite a bit of cement moves in that territory. He has had occasion to consider that, as contrasted with the kind of traffic in the Michigan peninsula.

That low grade freight which moves in heavy volume in C. F. A. territory is the most valuable revenue producing freight a railroad can have and he thinks that it contributes materially to the successful operation of a railroad system. Its cost is lower than the general run.

The witness has expressed the opinion generally, in some former hearing in which he has testified, that it is the best traffic a railroad can have. There is a very large volume of it in C. F. A. territory south of the Cleveland-Chicago line. That gives those roads, from a revenue standpoint, a great advantage over the roads situ-
1282 ated like witness' road. There is quite a heavy movement of bituminous coal from the areas reached by the Chesapeake & Ohio, the Virginian, and the Norfolk & Western into C. F. A. territory. The C. F. A. lines are not bridge carriers into Michigan. They are local distributors of coal, pretty generally.

Up to the Michigan border it would move in train loads, and then it is spread. It is retailed after it gets into Michigan. Witness presumes it is the same thing as in New England. The same thing is true with reference to the coal area in Pennsylvania. There is a heavy movement of that across C. F. A. territory, west and north, where it moves through C. F. A. territory in train loads, and then is peddled out by roads like the witness's road, just as it is in New England.

Referred to Mr. Williams' Exhibit 131, and his attention called to percentages, from which it appeared that 17.34 per cent. were products of mines, and that the corresponding figure for the roads having an interchange with the New England roads is 64.21 per cent., the witness said that traffic is of the character he has just referred to. The roads west of the Hudson enjoy a very much heavier coal tonnage than the New England lines. Witness thinks the coal traffic is ordinarily regarded as fairly profitable, but the business of peddling it out is quite another proposition.

1283 Witness does not think the railroads make much money out of l. c. l. freight.

Witness' Exhibit 152, sheet 3, shows the distance from Harlem River to Boston as 207 miles. Witness assumes that that is the route over which the traffic moves from the New Haven Railroad, although he is not sure about that. It may be that is the route via Willimantic, which is not the route over which the traffic moves.

Witness does not know what the distance is via the shore line. Witness has not included in these exhibits the floatage between the

Jersey shore and Harlem River, so that there should be added whatever the distance mileage may be.

North of what they call the 100 per cent. line, which will be Farwell, Michigan, witness' line gets an arbitrary deducted from any joint rate from any part of Michigan to New England. That is not the beginning of Zone B. That would be pretty close to the northern boundary of Zone C. They obtain an arbitrary of the difference between the Farwell rate, in the 100 per cent. group, and the rate from points north thereof, which are in the 100, 112 and 116 per cent. groups. That arbitrary is in lieu of, and is not in addition to, any percentage prorate or any mileage for the distance covered by the arbitrary. In other words, the prorate with the New England lines on the Farwell rate and divisions, and the additional
1284 rate over and above the Farwell rate accrues to the Ann Arbor Railroad. That arbitrary would vary. Farwell is the 100 per cent. point, and the next group immediately north of that is the 108 per cent.—68 per cent. of the difference in the through rate. The Michigan local rates, intrastate in Michigan, are built up on a mileage basis. The Anderson scale is a mileage scale. Asked whether it is not fair to make a comparison between New England divisions and New England local rates, with Michigan divisions and Michigan local rates, without respect to the respective hauls, the witness said:

"I will tell you why it is not fair. You have an established factor in the local rates that is not represented in the division of a joint through rate. It ignores the fundamental principle that we have adhered to, rightly or wrongly—I don't know; I am not arguing that—that in a local rate, the rate should decrease per mile as the distance increases. That is put in there on just one theory, that you start off with a known factor of a terminal expense on each end of the line, and, hidden in that rate adjustment there is the presence of a more or less allowance for that special factor. Now, that factor is greater in proportion to the short haul than it is the long haul, and for that reason you cannot compare, and you cannot get anywhere with a comparison, when you compare a division of a
1285 a long haul rate with a local rate for some other distance. Your comparison must be with equal hauls."

The Commission has established, for Michigan territory, local rates which are based upon mileage, which take into account the very factor witness has just stated. It is a diminishing return, as the distance grows. They have done the same thing in the Anderson scale in New England. Indeed, they have adopted the same scale of rates as the Michigan Zone B, with a diminishing return as the mileage increases,—they are built up upon that principle. The complainants have not compared the New England division with the Anderson scale and then compared that with the Michigan division and the proportion witness' road gets out of its local scale. If you compare New England on the one hand, the divisions on through traffic, versus the New England local, and compare the

divisions in Michigan of the Michigan roads with their local, witness would go along. But witness says that the comparisons should not apply so far as C. F. A. territory is concerned, outside of the Michigan scale, except for equal hauls. In C. F. A. territory the scale established by the Commission is on a mileage basis, and this comparison would apply to all C. F. A. territory. It would not apply to Trunk Line territory. Local rates may be considered, or
1286 have been considered with reference to an approximation of cost. In a general way they must be based more or less upon cost. Cost of service is one of the things by which they are justified. The division presumes to represent some reference to cost of service. Witness thinks the return on the C. F. A. roads, since the increase in the rates under Ex Parte 74, is disappointing. They hope for 6 per cent, that is all, and have not reached it. The showing is four and a fraction, but that fraction is decreasing every time the hands of the clock go around. Witness understands that the general showing in New England is very much worse than the rest of the country.

When witness formed his opinion that the divisions were very liberal to New England, he gave consideration to the revenue needs of New England only as expressed by the relative amount of service performed by the New England carriers in connection with the total haul. Apparently the revenue needs of New England are greater than that of the C. F. A. lines.

Witness has given some consideration to that fact in expressing his opinion about the liberality of the divisions. Witness is not able to say how the tonnage of his road is divided between tonnage local to C. F. A. territory and interchange with New England, or interchange with any group outside C. F. A. He has made no study of
1287 C. F. A. costs on this interchange business, or, not recently, on any of the business on the cost per ton per mile.

The margin of profit for all C. F. A. lines is four and a fraction. Witness thinks that on his own road it is something less.

Referred to his Exhibits Nos. 128 and 129, and the first illustration on page 2, witness says that one objection made to the showing made by Mr. Eaton and Mr. Wood is that they did not separate the C. F. A. divisions from the Trunk Line divisions. In this illustration the line from Rotterdam Junction is the New York Central clear through to Chicago. They can divide their rate between the East and West lines in any way they see fit. There are separate per cents. for the lines east and west of Buffalo.

Witness would not come to the conclusion, from the example under "Percentage Relationship, proportions to class rates," letter "D," that if the line from Rotterdam Junction to Chicago gets 99 per cent of its local rates, and the line from Buffalo to Chicago gets 76 per cent of its local rate, the line from Rotterdam to Buffalo gets more than its local rate, because they are using a very depressed, indefensible adjustment of rates, under which Albany takes 80 per cent. of the New York rate, and it is not, in witness' judg-
1288 ment, a fair method of measuring divisions. The rate from Albany to Chicago is 80 per cent. Eastbound it is 96. It does not follow at all that the division between Rotterdam and

Buffalo is a much larger percentage of the local rate than it is west. You would have to take into account what the local rate is from Rotterdam to Buffalo. It is not there. It is not on these sheets at all. It is not obvious that if from Rotterdam to Chicago the New York Central gets 99 per cent. of the through local rate, that it gets that and more from Rotterdam to Buffalo.

Witness's third illustration, on page 2, is by a differential route, where the through rate is less than the standard lines. That comes into C. F. A. territory at Detroit. The Wabash road is getting that business via this differential route in competition with the standard lines. Witness would expect not only the rate to be less, but the divisions to be smaller, where there is competition. That accounts for the smaller percentage of the C. F. A. proportion.

Pretty generally, in Exhibit 128, the C. F. A. lines and the Trunk Lines are one system.

With reference to the third illustration it has almost invariably been by the differential route.

Witness picked out page 24 of Exhibit 128, as an illuminating example, because the New England lines had a haul of 281
1289 miles and the C. F. A. lines had a haul of 281 miles. He compared the divisions on the Rotterdam-Buffalo route with divisions on the Newport-Detroit route.

The C. F. A. lines take a lower division out of the differential rate than they do out of the standard rate, because there is less rate to start with. They take a lower percentage because they are competing with standard lines in C. F. A. territory. So do the New England carriers. Not all the cases where witness has said hauls are comparable in C. F. A. territory and New England territory, are cases where the haul is by a differential route.

Taking page 27, St. Johnsbury, Vermont, to Cincinnati,—in the second column, via the Jersey City route, the Western lines have 333 miles, New England; the last column, the route via Detroit, 281 milles. That is not quite as close a comparison as you can probably find, but it will illustrate the reason the witness said no. In that case the New England line, on first class, gets 61.6 per cent of its local rate. The C. F. A. carrier, on first class, gets 39.1.

The first illustration is by a standard line, and the second illustration is by the differential route.

Under the Jersey City route you will find 333 New England, and 311 C. F. A.

1290 Take page 33. Witness turns to that because it is the next handiest one that he can locate readily, Keene to Cleveland, via Rotterdam. That is a standard route, 141 miles New England, 182 miles C. F. A. The percentage result in New England is 65.4, and C. F. A. 34.9. Witness cannot agree that you can get any other result out of this method of comparison, except one that inevitably must follow when the New England lines receive, in their present percentage proportion, such an excess in mileage over their actual distance. He cannot see how it will work out in any other way.

Witness thinks it is as good a reason as any other that he knows of, when he is asked whether, to a certain extent, the cost of opera-

tion was not taken into consideration in fixing the C. F. A. scale. Assuming that it was, the cost of operation per mile for 50 miles of haul is more than it is for 100. That is a factor that is in the American rate structure all over the country. If it was not, the rate from New York to San Francisco would probably be $10 or $15 a hundred pounds. It must drop down. On a through rate, where you divide it up amongst several railroads, that factor, so far as percents are concerned, bearing in mind that percents represent cost, because they are approximately on a mileage basis, is not evident to such a degree.

1291 Referring to Boston to New York, witness understands that there was put into the original New York-Chicago scale, 3 cents for terminal on each end, 3 cents at Chicago and 3 cents at New York. That is the way rates are made. It has been before the Commission. The ratio of that cost factor, spread out on a thousand miles from New York to Chicago, must be less than it is if it is taken up only on 50 miles, and for that reason witness says that this test does not mean anything on percentages. It does not have anything to do with the merits or reasonableness of a percentage. Witness speaks of the test that complainants submitted as Eaton Exhibit No. 43. In witness' judgment, after having made this study, reference to local rates does not throw any light upon the question, and is not based upon the facts as he has them. If you were prorating mile for mile, or 50-mile blocks for 50-mile blocks, then it would have some influence, and witness thinks complainants might be entitled to claim it, on the basis of the C. F. A. scale representing 100 per cent, and complainants' own representing 10 per cent higher he thinks complainants' theory then would be all right.

1292 If you start with the assumption that local rates are based to some extent upon cost, divisions could be studied with reference to local rates, if the divisions were prorated in exactly the same way as the local rates are, which divide in 5, 10 and 15 mile blocks.

Witness' Exhibits Nos. 156 to 163, inclusive, have no reference to the subject matter of Exhibits 128 and 129. They are divisions selected from the same C. F. A. points that complainants have used. Then witness built up two suggested parallels, one, divisions based on actual mileage prorate and one based on a 20-mile block at either end, and one based on a 50-mile block at either end. In all fairness large shipping points should be at the extreme end of a division block.

Asked whether it is not, just as Boston is at the end of the block from Harlem River to Boston or Rotterdam Junction to Boston, and whether that compares fairly, the witness said: "Oh, no, they do not compare fairly. The big shipping point is at the end of the block, but you have included as intermediate in that block a great deal of territory of importance from a tonnage standpoint, which is not reflected in your divisional arrangements."

Considering the block from Buffalo to Cleveland the New York Central has one or two branches running south. Witness does not know whether they are included in the same block.

Erie is an important point between Buffalo and Cleveland. Witness thinks it would compare very favorably with Worcester. Ashta-

bula, another intermediate point, is chiefly a lake port for coal. Witness does not think it has any importance otherwise. Dunkirk is a fairly large town.

Asked whether there are not a number of considerable places along that block which might possibly compare with places on the Boston & Maine's Fitchburg division like Fitchburg or Ayer, which are towns but not very large cities, the witness replied that he was not familiar with that New England situation.

Asked whether these two blocks are not pretty fairly com-
1293 parable, so far as mileage is concerned, the witness said:

"The Fitchburg division of the B. & M.; you have a 209-mile block, and a 212-mile prorate, as I recall it, by Rotterdam. Here we have a 184-mile block with a 183-mile prorate. In that particular instance, I think they are pretty fair. It is an even shake, yes, sir."

Witness would not go along in saying that from Harlem River to Boston by the New Haven compares pretty evenly with that, because there are a great many more important tonnage producing points in there than between Cleveland and Buffalo. At least, witness understands so—much larger towns.

Some of the towns between Harlem River and Boston are not in the Boston block but are in the Hartford block, but there is not very much difference in the per cent. The mileage is slightly less. There is this fundamental difference, that that block from Buffalo to Cleveland is a link in a through line east and west, over which moves heavy traffic from points both east and west of the two terminals; whereas, in New England, Boston in both cases is the end of the block, and the traffic all stops there, or short of there, and has to be distributed, with all the attendant terminal expenses. Terminal expense ought to be considered in arriving at divisions; but does not
always justify the terminal road in having a larger division,
1294 not even as a usual principle. It does where there is a comparatively short haul, where an actual mileage prorate would not compensate them for the road haul and their terminal service, but in a long haul, the actual mileage is used.

If these divisions were satisfactory at the time they were established, and new conditions have arisen in New England which have greatly added to the burden of operation in New England, which are of a permanent character, in witness' judgment those things might be considered under proper conditions in adjusting divisions. It should be recognized for all lines interested in that particular percentage.

Redirect examination:

Witness does not think that as a practical railroad man he would recognize cost of service on the participating lines as a controlling principle in the fixing of divisions. It is frequently the case that the strategic position of a line, in throwing business from one competitor to another, might enable it to disregard the comparative cost of service on it and its connections, in fixing divisions.

Referred to computations showing a larger share or percentage of the local earned by C. F. A. lines than by New England lines, and asked how that would run, if only the reasonably equal hauls in the exhibits were considered, the witness said:

1295 "If haul for haul were compared, I think that the exhibit would unquestionably and must necessarily show that the New England lines would receive a materially greater percentage of their local rate than the C. F. A. lines."

The main objection to the exhibit is due to the presence in that exhibit of a number of unfair comparisons of long hauls with short hauls, and that is in there, because the hauls west of the Hudson River, until you reach C. F. A. territory, take into account the mileage from the Hudson River to Buffalo or Pittsburgh, and you cannot get a great many comparative hauls in C. F. A. territory, due to the fact that the New England lines are, on the average, shorter than the hauls west of the Hudson River.

The C. F. A. lines south of Michigan carry on pick-up and distributing business on their own lines, in connection with this fuel situation. It would not be true, to take the percentage of their business that relates to fuel and say that that represented a trainload tonnage movement over their lines.

So far as witness knows, his comparisons using 20 miles and 50 miles for terminal services do not represent divisions made on that basis, in effect in C. F. A. and Trunk Line territory. He selected the 20 miles addition simply to test out on his own lines this
1296 question, using that factor, because it was a rule in effect during the Railroad Administration. That rule was that an actual mileage prorate would be made, plus 20 miles for each terminal line, where there were no established divisions in effect. That is the first instance, to witness' knowledge, where there has been added to the actual mileage of a railroad a fixed additional allowance as representing the terminal costs.

Under the theory of allowing a constructive mileage for terminals to the originating and delivering line or to the terminal lines, rather, the intermediate line must necessarily suffer. Its proportion is less, just exactly in the ratio the added mileage is to the total mileage. That theory ignores entirely the intermediate line. On that basis the intermediate line would get nothing in the way of constructive mileage for the portion of the terminal haul that was spread over its mileage. It does not exactly seem a fair thing to the intermediate line to put into percentages an additional or constructive mileage for terminal lines. In many cases the intermediate line will have just as much terminal expense in receiving the freight from its connection, carrying it on, and delivering it to the next connection, as either the originating or delivering line may have.

1297 Witness does not know why the constructive excess mileage was first placed there for the New England lines. The showing, as far as he has seen it, indicates that the New England lines receive anywhere from say 30 to 60 or 75 per cent. more than an actual mileage prorate would yield. That is a very unusual situation,

as far as witness knows. He has never seen anything like it. They have, in a more modified form, somewhat a similar situation in Michigan. The constructive mileage in Michigan does not offset the constructive mileage added in New England. As a result of that the examples witness has filed will show that, mile for mile, the Michigan roads obtain less than the New England lines. He does not know why that shoud exist for the New England lines, and he can only surmise why it exists for the Michigan lines. He thinks that the excess mileage of the Michigan lines merely reflects the fact that their rates from Michigan into New England are higher than a base rate, and, maintaining that system of rates, that they are entitled to the excess. In other words, they have there in not quite so well defined shape, what witness' lines have in their Michigan zones. There it is expressed uniformly in their classes, and they receive that in excess of a mileage prorate. Witness cannot account for the presence of the excess mileage in the New England groups.

1298 Recross-examination:

All the way from Toledo to Frankfort witness' road gets more than 100 per cent. in excess of its actual mileage. Those constructive mileages were established and acted upon for years before they had any zone system of local rates in Michigan. Their base rate was substantially higher than it was in C. F. A. territory below Chicago and Cleveland. In the Michigan percentage case, witness endeavored to explain that they had a higher rate from Michigan to New England. That case was 25 or 30 years ago. Witness does not think the divisions were before that case. He thinks the rates were there when the divisions were made. In other words, he thinks the divisions succeed the rate—come after the rate.

The Michigan per cent. case is 47 I. C. C., 409, decided November 28, 1917; but that has nothing to do with the rates in effect from Michigan to New England. That is not the zone case. The zone case was decided about the same time. Prior to that, Michigan had higher rates than the rest of C. F. A. territory. The difference was not in the exact terms that they now have them expressed in their zones, but the rates from Michigan as to C. F. A. have always been higher. There were no zones, distinctively, as such. The rates from Michigan points have been higher than from points in other C. F. A. territory, ever since witness has had any knowledge of the
1299 general rate structure in C. F. A. territory. Both the divisions and the establishment of the rate are beyond witness' recollection,—that is the rate from Michigan into New England.

The witness continued:

"Just before you leave this, I do not want to have on this record anything that would make it appear that the excess mileage on the Ann Arbor Railroad results in giving them any greater share of the rates than the New England lines receive, because that is not a fact. My exhibit 166 will set that forth. On page 4 the situation from the Ann Arbor Railroad to the New Haven is set out. At Ann Arbor, Mich., 45 miles from Toledo, we receive a 150-mile prorate, 15 per

cent. of the rate; for a comparative haul on the Central New England, Hopewell Junction, 40 miles, they receive 25.1 per cent. of the rate.

"For 74 miles, in the next block, the Ann Arbor receives 16½ per cent. and the New Haven receives 23.9 per cent.

"In the next block, 107 miles, we receive 19.1 per cent., and the New Haven—in that illustration their haul is 105 miles—receives 23 per cent.

"At Alma, Mich., for 145 miles, we receive 22.4 per cent. of the rate, and the New Haven 21.9.

"In the next block we receive 26.7, and the New Haven 20.5.

"The showing on the whole for the Ann Arbor Railroad
1300 is that they receive a lesser division of the rate, mileage considered, than does the New Haven. There are other illustrations in there for the Ann Arbor Railroad that will show the same thing.

"That is not a division; that is a percentage regardless of the rate. Those are the percentages in effect between the Ann Arbor and the New Haven.

"The figures that I have read have no reference to the local rates. Local rates are in that illustration, but the percentages I give apply to any rates."

The joint through rate from New York to Chicago is very much less than the sum of the intermediates. If there were any instance where the sum of the locals was the joint through rate, then Mr. Eaton's exhibit showing 99.3 per cent. would be correct.

W. C. Maxwell, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is the vice-president in charge of traffic of the Wabash Railway Company. For 24 years he was with the Burlington Railroad in the local freight office and general office, and as division,
freight and passenger agent, and assistant general freight
1301 agent. He came to the Wabash in 1905 as assistant general traffic manager; was later made general traffic manager, and in 1915 vice-president in charge of traffic, which position he has occupied since, except during Federal control, during which time he was general traffic manager of the Wabash and a member of the Eastern Freight Traffic Committee.

In connection with this case he has given some consideration and study to the general traffic problems involved in the proceeding, and has had his attention directed to Brigham's Exhibit No. 6.

Asked what he has to say in regard to it, the witness said:

"Brigham No. 6 shows the following figures as representing the increases in freight revenue necessary, prior to the Labor Board award, to enable the Eastern territory carriers to earn 6 per cent. upon the valuation fixed by the Commission:

"It indicates that New England needed 47 per cent. plus; trunk lines, 29 plus; Central Freight Association, 24 plus.

"I present Exhibit No. 172, which is a summary of property investment, adjusted net income, percentage of return, return needed prior to the Labor Board's award to earn 6 per cent., and ad-
1302 vance required on the basis of the year ending October 31, 1919, adjusted."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 172, Witness Maxwell.

The witness continued:

"This data is from the same source as Brigham Exhibit No. 6, with certain changes I have made as to grouping of trunk line and C. F. A. lines. No further changes have been made. I have taken the original statement at its face value, which shows that the New England lines needed 47 per cent. plus, the trunk lines 29 plus, and the C. F. A. roads 24 plus.

"Please refer to page 3. I have taken from the trunk line group the B. & O. and the Erie. By so doing it indicates that the trunk lines needed 27 per cent. plus.

"On page 4 I have added to the C. F. A. group the results of operations of the B & O. and Erie, and the inclusion of these two roads indicates that the C. F. A. roads needed 29 plus. I made these changes because approximately 65 per cent. of the B. & O. mileage and 40 per cent. of the Erie mileage is in C. F. A. territory, and they cannot be considered as entirely trunk line roads.

"The operations of the Toledo, St. Louis & Western—a road in receivers' hands, a class I road—and the Pittsburgh & West Virginia were omitted. The operations of the C. & O. of Indiana were
1303 included with the C. & O. in the trunk line group. The C. & O. of Indiana operations should have been separated and included in the C. F. A. group.

"The inclusion of these three roads would have increased the needs of the C. F. A. roads to a figure above the 29 plus shown by the inclusion of the B. & O. and Erie in the C. F. A.

"I call attention to the footnote on this page about the C. P. & St. L. and T. P. & W.—on page 5 of the exhibit. These two roads are in Official Classification territory.

"It is page 3, I guess—it is sheet 4, at the bottom of sheet 4; that footnote about the C. P. & St. L. and the T. P. & W., their showing during the adjusted year.

"Through inadvertence those two roads were omitted from the C. F. A. group and included in the Western group in Ex Parte 74. Their inclusion in the C. F. A. group, where they properly belong, would further increase the needs of the C. F. A. roads.

"The operations of the Toledo, St. Louis & Western and the Pittsburgh & West Virginia for the test year were omitted from the list of roads in the Eastern group in Ex Parte 74.

"I draw the conclusion that the statement of the New England lines that the C. F. A. roads needed but 24 per cent. plus is
1304 erroneous and therefore misleading, and I file this exhibit to

remove any false impressions that may have been obtained from that statement, and also from the further fact that there seems to be a necessity for having such false impressions removed, as illustrated by Mr. Campbell's testimony on page 1169 of the record. I simply mention this because, weeks after, while the case was in progress, this impression seemed to still prevail, and goes through this record.

"I quote from the testimony:

" 'The Commission may, by reason of the difficulties which the trunk lines present in the solution of this problem, find it necessary to reopen Ex Parte 74. This would leave trunk line and New England jointly as one group and make possible such adjustment of rates as to yield to the two groups combined into one the requisite revenue contemplated by the Transportation Act. A rearrangement of Eastern territory upon this basis would not create a rate situation differing greatly from that which has for many years existed and is in vogue at the present time, i. e., C. F. A. territory having a lower rate level than either trunk line or New England.'

"I think it is very dangerous to the C. F. A. to have that impression, that we got more than we were entitled to, still in this
1305 record, and I will comment later about what is said here about the rates.

"This shows that even he thought that the C. F. A. roads had received too much and that regrouping might be necessary and the C. F. A. rates lowered.

"The placing of a part of the Labor Board award on passenger traffic at a uniform percentage increase operated to the disadvantage of the C. F. A. roads and to the advantage of the New England and trunk line roads, as there is a much greater ratio of passenger revenue to freight revenue in both New England and trunk line territory than there is in Central Freight Association territory."

Witness' next exhibit is a statement of percentage increase obtained by each sub-group in Eastern territory under Ex Parte 74.

The statement referred to was received in evidence and marked Defendants' Exhibit No. 173, Witness Maxwell.

Asked to state what his Exhibit 173 shows, the witness said:

"It shows that on traffic to and from Southern territory, New England, trunk line, Pocohontas, C. F. A. and Illinois Freight Committee territories each obtained 33⅓ per cent.

"In the next column is a statement of the oSuthwestern territory: from New England, 40 per cent., except as shown in the foot-
1306 note, that on a limited number of commodities, northbound, handled under through rates in Southwestern territory, the percentage was 33⅓; from trunk line, 40 per cent. with the same exception; from the entire C. F. A. territory except Illinois Freight Committee, 33⅓;—6⅔ per cent. less than either the trunk lines or New England; from the Illinois Freight Committee territory we come under the Western advance and got 35 per cent.

"The next column is the Western Trunk Line territory: New England, 40 per cent.; trunk line and Pocohontas, 40 per cent.;

C. F. A. except Illinois Freight Committee territory 40 per cent.; Illinois Freight Committee, 35 per cent. From that territory we also get less than the New England or trunk lines.

"In that connection I call attention to the explanatory note in connection with the Illinois Freight Committee territory—no; that is the Western Trunk Line.

"Northwestern territory: New England, 33⅓; Trunk Line and Pocohontas, 33⅓; C. F. A. 33⅓ except on bituminous coal from Indiana mines to the Northwest; on which they got 35; Illinois Freight Committee, 35; all roads there having got less than 40 per cent.

"Intermountain and Pacific Coast territory: New England, eastbound, 33⅓; trunk line, 33⅓; C. F. A. 33⅓; Illinois Freight
1307 Committee, 33⅓; westbound from New England, 40 per cent. except from Boston, Portland, Brunswick and Lewiston, also from other points on traffic passing through Boston; New England faring better there than other parts of the territory.

"Illinois Freight Committee territory is uniformly 40 per cent.

"Between C. F. A. territory and New England, eastbound, 37½ per cent.; westbound, 40 per cent.; trunk line and Pocohontas, 40 per cent.; C. F. A., 40 per cent.; Illinois Freight Committee, 40 per cent.

"In other words, we received a smaller percentage of increase on the C. F. A. traffic to New England than we did on traffic interchanged with trunk line or any other part of the Eastern territory.

"Brigham Exhibit No. 14 shows that the traffic interchanged between New England and Southern territory based on October, 1919, equated to yearly totals, was 930,478 tons, or 2.8 per cent. of the total interchange traffic, which is but a small fraction of one per cent. of all the traffic handled by the New England roads.

"I am certain that the percentage of traffic interchanged between C. F. A. and Southern roads bears to the total C. F. A. traffic a greater percentage relation than a similar comparison would show for trunk line and New England lines.

1308 "On the Southern traffic, as stated, the New England and trunk line roads obtained their 40 per cent., except as shown by the footnote on the exhibit, and the C. F. A. roads but 33⅓ per cent. The volume of traffic interchanged between Southwestern roads and Central Freight Association roads is a much greater proportion of the total traffic of the C. F. A. roads than the percentage similarly arrived at for trunk lines and New England roads. Both the trunk line and New England roads fared better than the C. F. A. roads, inasmuch as they obtained 40 per cent., whereas the C. F. A. roads obtained but 33⅓.

"Western Trunk Line: 40 per cent. to all Eastern sub-groups, except that the C. F. A. roads with mileage west of the Illinois-Indiana state line obtained but 35 per cent. on traffic to and from points west of that line.

"There is a big tonnage to and from Chicago and points in Illinois west of the Illinois-Indiana line, handled by roads included in the Eastern group. This is particularly significant in the case of the Illi-

nois Central north of Cairo, which includes all of its traffic west of the Illinois-Indiana state line to and from Western Trunk Line territory and all of its traffic in the states of Wisconsin, Minnesota and Iowa; also in the case of the Wabash on all of its traffic west
1309 of the Illinois-Indiana line to and from Western Trunk Line territory and all of its traffic in Iowa and Missouri.

"All traffic to and from rails of Eastern roads west of the Illinois-Indiana state line when to or from Western Trunk Line territory is handled under advances granted to the Western roads in Ex Parte 74, and therefore they obtain but 35 per cent.

"Northwest: 33⅓ per cent. for all sections except Illinois Freight Committee territory, which got 35 per cent. There is a limited traffic from New England to a limited territory in the Northwest, whereas from C. F. A. territory there is a very large tonnage interchanged, and this is particularly significant in connection with coal from Illinois and Indiana mines.

"Intermountain and Pacific Coast: The New England roads obtained 40 per cent. on westbound traffic, except as shown in the footnote on the exhibit, whereas all trunk line and C. F. A. roads received but 33⅓ per cent.

"Illinois Freight Committee territory: 40 per cent. for all groups.

"C. F. A. territory: All of the Eastern sub-groups 40 per cent., except that the increase eastbound from Central Freight Association territory to New England territory was approximately 37½ per cent.

1310 "The New England carriers got 40 per cent. on substantially all of their traffic, intra and interstate.

"The C. F. A. roads got less than any sub-group in the matter of advances; first, because they obtained less percentages on inter-territorial traffic; second, their inter-territorial traffic is a much greater proportion of their total traffic than that of the trunk line and New England roads."

Asked his basis for the statement that the C. F. A. roads obtained only 37½ per cent. on the eastbound traffic interchanged with the New England lines, the witness said:

"That was due to the arbitraries over New York 7 to 2 cents not being increased 40 per cent. I present Exhibit 174, which is a statement showing actual advance in class rates from representative points in C. F. A. territory to New England under Ex Parte 74."

The statement referred to was thereupon received in evidence and marked Defendants' Exhibit No. 174, Witness Maxwell.

The witness continued:

"This exhibit shows the rates from St. Louis, Chicago, Cincinnati, Detroit and Cleveland to New York on the six classes and to New England on the six classes, prior to Ex Parte 74, and the present rates. It indicates that the advances from all of these cities
1311 to New York were uniformly 40 per cent. From St. Louis to New England the advances range from 37½ to 38 per cent.; from Chicago, 38½, 37½, 38, 37, 37½, 38; from Cincinnati,

from 36 to 37½ per cent.; from Detroit, 37 to 38 per cent.; from Cleveland, 36 to 37 per cent.

"It indicates that none of us got the full 40 per cent. because of this way of making the rates, and that New York and all other parts of the territory have stood a greater proportion of percentage advance than New England. In other mords, only part of that rate was advanced."

A statement on the commodities was received in evidence and marked Defendants' Exhibit No. 175, Witness Maxwell.

The witness continued:

"This exhibit shows the rates prior to Ex Parte 74, the present rates, and the percentage of increase, from Chicago to New York and to New England, on grain, grain products, flour, petroleum, plaster, bleach, soda, and spelter products, and it shows the same situation—that the advances to New England were 37 per cent. except on oil, which was 35, and spelter products, which was 38; and to New York, on all the commodities mentioned, 40 per cent., except oil, which was 36.

"Brigham Exhibit No. 14 shows traffic interchanged be-
1312 tween New England and C. F. A. territory for a year based on October, 1919, equated to yearly totals, as follows:

"Tonnage, 9,262,437 tons.

"Revenue, $47,865,258.

"About 80 per cent. of the tonnage is eastbound, and about 69 per cent. of the revenue is on eastbound tonnage; therefore the difference between 40 per cent. and 37½ on 69 per cent. of $47,652,258 represents a loss of about $800,000. That is an annual loss, and that goes with all of us, in falling that much short of the 40 per cent.

"The Central Freight Association Accounting Committee is reworking the tonnage for the month of October, 1920, so as to show the amount in money that the Central Freight Association carriers fell short of obtaining 40 per cent. on the traffic to and from each territory, separately. We hoped to have this exhibit ready today, but it will probably be some little time before we can complete it."

Witness has not figured these percentages exactly. He has left out the close fractions, but they do not materially change the thing. They are very closely representative.

The statement was received in evidence and marked Defendants' Exhibit No. 176, Witness Maxwell.

Exhibit 176 is a statement showing the amount of losses the car-
riers in C. F. A. territory have sustained and are still sustain-
1313 ing on intrastate traffic through failure to get the full percentage increase granted under Ex Parte 74 in the various states.

The losses in money in the various states are as follows:

"Michigan (passenger), annual loss, $2,978,000.

"I will not call the odd dollars.

"Ohio, $5,018,000.

"Indiana (freight), $3,500,000.
"Indiana (passenger), $2,058,000.
"Illinois (freight), $3,070,000.
"Total, $16,625,000.
"Illinois passenger loss from August 26th to December 7th, $2,096,000.
"Total, $18,722,000."

During the week the Commission handed down its opinion and orders in the Ohio passenger and Illinois freight cases.
The witness continued:

"I am very happy to say that we have been granted these full increases in Ohio passenger, effective shortly, and on the Illinois freight effective about the 7th day of March, if we can get the tariffs in. We will have another six weeks to sustain these losses."

Witness submits these figures in this connection, simply
1314 as a further indication that the Central Freight Association carriers have not the money to spare for the New England roads.
The witness continued:

"Exhibit 177 is a summary of the operations of C. F. A. groups I and III (as grouped in the first Five Per Cent Case and I. & S. 965) for the fiscal years 1903 to 1917 inclusive, showing the return on property investment, as compared with the same figures for five of the principal New England complainants, i. e., Boston & Maine, Central New England, Maine Central, New York, New Haven & Hartford, and Rutland. It also shows the results by five-year periods, and for the test period, 1915 to 1917, which naturally became the incomes on the same basis practically up to September 1, 1920."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 177, Witness Maxwell.
The witness continued:

"It will be noted that the T. P. & W., C. P. & St. L. and C. & A. are in C. F. A. groups I and III. These roads are not shown in the Eastern rate group in Ex Parte 74; their exclusion, however, does not materially alter the showing.

"I wish to say in explanation of these groups that group No. I covers 28,186 miles of railroad and 78.6 per cent. of the mile-
1315 age in C. F. A. territory. The balance of the total mileage of about 36,000 miles is made up of about 40 small roads which were generally bankrupt—2,729 miles and 6.6 per cent. of the total. Also the B. & O. and Erie are not included here, because we could not separate their operations. They had at the time this was made up 3,000 miles in C. F. A. territory—3,042—which represented 8½ per cent. The balance of the mileage is Group V, which is the mileage of the C. B. & Q., L. & N., Mobile & Ohio, Norfolk & Western, Iron Mountain, St. Louis & Southwestern, and the Southern, extending into the territory. That is in Illinois, and their operations are

not a material part of the mileage and could not be separated from the showing as a whole.

"Group III is the typical group taken by the Commission as to the situation in the Central Freight Association territory; 23,167 miles, 19,416 of which is in the territory and it represents 51.5 per cent. of the total mileage.

"The five New England lines are the Boston & Maine, Central New England, Maine Central, New York New Haven & Hartford, and Rutland.

"The source of this information is shown at the bottom of this page. The New England returns were compiled from pages 7, 10, 29, 32 and 39 of Bureau Exhibit No. 2, Volume II, 15 per cent. rate case. The showing of the other two complainants is not in-
1316 cluded, and we did not have time to get it, but I do not think it alters the point that we hope to bring out in connection with this situation.

"It will be noted that the averages were as follows:

"For the five-year period ending 1907, return on property investment, New England roads, 5.43; Central Freight Association, Group I, 4.65; Group III (the typical group), 3.97.

"For the 5-year period ending 1912: New England roads, 5.40; C. F. A. Group I, 4.39; C. F. A. Group III, 3.14.

"For the five-year period ending 1917: New England, 5.14; C. F. A. Group I, 4.14; Group III, 3.08.

"Average for the test period, 1915 to 1917: New England, 5.60; C. F. A. Group I, 4.77; C. F. A. Group III, 3.84.

"That represents the return during Federal control and the guaranty period. It brings it up to September, 1920.

"Average for the entire period, 1903 to 1917: New England, 5.31; C. F. A. Group I, 4.37; Group III (the typical group), during all these years, 3.36.

"In every case the return on the property investment of these New England roads was materially in excess of the C. F. A. Group I and markedly in excess of C. F. A. Group III, which was accepted by the Commission as typical of the situation in Central Freight Association territory, and this relative situation existed throughout all these years, as well as during Federal control and the guaranty period.

1317 "During this long period of years, when the New England lines were far more prosperous than the C. F. A. lines, there was no general complaint that the divisions were unfair to the New England roads.

"During this long period of years the New England roads were receiving a fair return on their property investment and the C. F. A. roads were at the point of starvation and struggling with receiverships.

"The C. F. A. roads were in a generally bankrupt condition, and commenced in 1913 to try to correct this situation through a revision of rates. The Interstate Commerce Commission recognized this condition and said the rates should be revised. The revision was granted in I. & S. 965, and the rates became effective September

20, 1917. I call attention to the important fact that with the exception of the period from September 20, 1917, to December 31, 1917, the C. F. A. carriers obtained no benefit as far as their corporate incomes were concerned from the revision in rates until September 1, 1920. In other words, they were in a bankrupt condition over a long period of years, and relief was granted in 1917, but it never became available (except for the short period of about 13 weeks in the latter part of 1917) until September 1, 1920, because the corporate incomes during Federal control and the guaranty period were
1318 based upon the results of operation for the three years ending June, 1917. Therefore the mileage in C. F. A. territory,
35,849 miles, was in a generally bad financial condition over the period 1903 to 1917. This situation continued until September, 1920.

"During this period of years many of the roads passed through the hands of receivers, namely, the C. & E. I., Pere Marquette, Wabash, Toledo, St. Louis & Western, C. P. & St. L., Wheeling & Lake Erie, and Pittsburgh & West Virginia. The C. & E. I. and the Toledo, St. Louis & Western, as well as the C. P. St. L., are still in the hands of the court. The Wabash, Pere Marquette, Wheeling & Lake Erie, and Wabash-Pittsburg Terminal were reorganized, new capital put into the properties, and the fixed charges reduced.

"To illustrate, the Wabash was reorganized in November, 1915, and through assessment of stockholders and refunding bondholders $19,450,000 was put into the property. The annual fixed charges were reduced from $5,795,278 to $3,183,915. Fixed charges of $3,184,000 on 2,042 miles of railroad, 322 miles of it double-tracked, with extensive terminals at such places as St. Louis, Detroit, and so forth, are excessively low.

"The C. F. A. lines have nothing to spare, and it would only intensify the situation to transfer the New England lines'
1319 troubles on a portion of 7,000 miles of railroad to approximately 36,000 miles of railroad in Central Freight Association territory.

"The proposition of the New England roads that $25,000,000 be set aside by the roads west of the Hudson River so that the complainants may earn 6 per cent. on their valuation as fixed by the Commission in Ex Parte 74, which no other group in the United States is now doing, means setting aside by the roads west of the Hudson River for the use and benefit of the New England roads a sufficient sum to carry $416,666,666 of their property investment, which they now show as $838,000,000 (excluding the B. & A.) or 49.7 per cent. of the entire property investment.

"Exhibit No. 178 is a statement showing the increase of class rates from representative points in Central Freight Association territory to New York versus New England since 1914."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 178, Witness Maxwell.

The witness continued:

"The arbitraries over New York 7 to 2 cents were not increased under the decisions in the Five Per Cent Case, the Fifteen Per Cent Case, General Order 28 and Ex Parte 74, the result being that the carriers never obtained the full benefit of the increases granted
1320 under any of these decisions upon traffic from C. F. A. territory.

"The cumulative effect of these failures is that the railroads have advanced the rates 10 per cent. more between all points in Eastern territory than the rates were advanced from Central Freight Association territory to New England, thus depriving New England and other carriers in the Eastern territory of millions of dollars.

"That will be shown by referring to this table, which shows that the rates to New York were advanced say an average of 110 per cent. to 113 on second class—in some cases a trifle more and in some a trifle less—whereas to New England the advance is an average of about 100 per cent.; it runs down to 98 on some classes and as low as 95 from points like Cleveland and Detroit; the effect of that being a very severe shortage of revenues for these carriers under all of these decisions."

That extends back quite a number of years, and it also extends right to this recent decision.

The differential of 7 to 2 is maintained in all instances, and undisturbed. The same differential applies to St. Louis. St. Louis rates are made 117 per cent. over the Chicago rates to New York, and then the 7 cents is added to that.

1321 Witness was Chairman of the Traffic Committee having charge of the C. F. A. revision, which work extended over a period 1913 to August 24, 1920, the latter being the date when the C. F. A. class scale of rates was put into effect in the State of Illinois, being put in August 24th for a foundation upon which to build these advances.

In connection with the revision work, it was necessary to study the structures in Eastern territory, also in other territories.

Witness was a member of the Eastern Freight Committee from April, 1918, to November, 1919, at which date he returned to the corporation, and also became a member of the Eastern Corporate Traffic Committee.

This revision work, which is still being pursued, required the study of the New England situation—witness refers to the revision work down here, the trunk lines, 10-class scale, and that sort of thing—and this work in connection with the work of the Eastern Freight Traffic Committee in passing upon every application for any change in rates, rules, or regulations in Eastern territory for 19 months, enabled witness to obtain a fair knowledge of the rate structure. Witness was a member of this Eastern Freight Traffic Committee at the time the decision was rendered, promulgating the Anderson scale for the New England roads. That decision was an-
1322 nounced a short time prior to General Order No. 28.

It was put in effect by the New Haven road only, plus advances granted in General Order 28 on June 25, 1918. It developed

that the other roads had not made proper preparation to put the rates in effect, and were unable to do so on short notice.

The people in New England protested against the increased rates to the Hudson River gateways until such time as relative advances were made from trunk line territory to the Hudson River. The New England people did not object to the measure of the rates themselves. They were willing to pay the rates provided relative advances were made from Trunk Line territory to the Hudson River. The result of these protests was that the administration ordered the rates reduced to the Jersey City, Albany or other Hudson River gateways as maximums.

Witness does not recollect whether his committee made any definite recommendation on reducing the rates of the New Haven from New England to the Jersey City rate, as a maximum to New York; but several members of the committee felt that the Anderson scale rates per se were reasonable and should be put into effect, and that lower rates beyond were unreasonable and should be advanced.

1323 Witness has an exhibit which shows the effect of putting in the Anderson scale.

The statement referred to was received in evidence and marked Defendants' Exhibit No. 179, Witness Maxwell.

The witness continued:

"Exhibit 179 shows the present rates from Boston and other important points in New England to New York and other Hudson River gateways and also some important points in the trunk line territory beyond New York. It shows the present rates, the Anderson scale plus advances under General Order 28 and Ex Parte 74, and the C. F. A. scale.

"This shows the present rate from Boston to New York as 74 cents; under the Anderson scale it would be 87 cents. The present rate Boston to Philadelphia is also 74 cents; under the Anderson scale it would be 96½ cents; under the C. F. A. scale, 93 cents.

"Boston to Albany: present rate 70½ cents, Anderson scale 84½, C. F. A. scale 80½.

"Boston to Utica: present rate 80½ cents, Anderson scale 93 cents, C. F. A. scale 88 cents.

"If the Anderson scale rates were applied as minimums, it would result in increasing the Boston to Philadelphia rate, first class, 13 cents per hundred, and increasing the rate to Utica from 80½ to 84½ cents.

1324 "I only mention these as typical."

Asked what comment he has to make on the rates from Portland, Maine, to Jersey City and Philadelphia, the witness said:

"The Portland to Philadelphia first class rate today is 95 cents, the same as New York, Baltimore being only 98 cents and Harrisburg 95 cents, whereas the Anderson scale would make the rate Portland to New York 98½ first class. The same situation applies to

Albany and points beyond, and from Worcester to New York and points beyond the situation is substantially as outlined above.

"May I make one more comment on this exhibit before passing it?

"I refer to the rate from Boston to New York, 214 miles, held down by the Jersey City rate, 74 cents. The rate to Philadelphia from Boston evidently was also 74 cents for a distance of 319 miles. I claim that if any commission fixes these rates for you they do not make any such wide blocking as that, where you jump 100 miles on a two or three hundred mile haul, without adjusting your rate and making people pay in proportion to the hauls they get. It goes throughout this exhibit. In other words, you can haul freight from Boston to Jersey City certainly cheaper than you can haul it from Boston to Philadelphia, and there should be some dis-
1325 tinction and the man should pay for the additional distance. That stands at 74 cents to Philadelphia, whereas you have got a reasonable rate in and of itself fixed by the Commission at 87½ to New York City. What should your Philadelphia rate be?

"If the Anderson scale were applied in full to the Hudson River and used as minimums for points beyond, it would be a big help to the New England lines as well as the trunk lines.

"It is evident that an adjustment between New England and the trunk line territories is necessary, as the rates are depressed below any reasonable scale fixed by the Commission. I am only talking of the rates between New England and trunk line.

"I present Exhibit No. 180, which is a statement showing the present class rates from important points in New England to the Pittsburgh group, with a comparison of the present rates versus the C. F. A. scale and the Anderson scale, and it indicates that the rates are unduly low. The situation as to rates from New England points to the Pittsburgh group is striking, as this group extends from Wheeling, W. Va., to Harrisburg, approximately 300 miles, and shows a very bad situation as to the level of the rates. These rates run from 15 to 38 per cent., or an average of 25 per cent. on
1326 first class lower than the C. F. A. scale which the shippers in Central territory are compelled to pay.

"An examination of this exhibit indicates that the present rate from Portland to Pittsburgh is 99½ cents, first class; distance, 761 miles. It also shows that the present rate from Worcester, 625 miles, is 99½ cents. Certainly you cannot buy any other kind of goods except fertilizer in some places at any such ratio as this.

"Now, below that, you have reasonable rates fixed by the Commission for such hauls. You have the Anderson scale, that from Portland would be $1.45 versus 95½ cents; from Boston, 99½ cents versus $1.31½.

"I simply present this to show that distance is largely disregarded and that the rates are markedly below reasonable rates fixed and in use in other important territories in the Eastern group."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 180, Witness Maxwell.

The witness continued:

"I present Exhibit No. 181, which indicates that the carriers received under Ex Parte 74, on traffic between the Pittsburgh group and New England, 36 to 37½ per cent., instead of 40 per cent.; whereas New York rates were increased 40 per cent. It should be borne in mind that these carriers receive 35 to 37½ per cent.,
1327 instead of 40 per cent., on rates that are badly depressed on a large volume of traffic.

"This exhibit also shows the percentages of advances made in rates between Pittsburgh and New York, approximately 110 per cent., versus Pittsburgh and New England, approximately 100 per cent., since 1913—the cumulative effect of not changing the differentials. It shows that New England failed to bear its just share of the burden on this traffic."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 181, Witness Maxwell.

Asked whether there is some statement he wishes to make about the differentials that were in effect, the witness said:

"Yes. I call attention to one point about this. This shows the present rate from Pittsburgh eastbound, to New England, at 99½ cents. The present rate is $1.01½, but tariffs are ready to be filed restoring the 2 cent differential. They will be out in a few days.

"I present Exhibit No. 182, which is a comparison of class rates from Boston versus St. Louis to Pittsburgh; also from Boston versus Chicago to Buffalo, since December, 1914."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 182, Witness Maxwell.

1328 The witness continued:

"This shows the distance from Boston to Pittsburgh as 654 miles, and St. Louis to Pittsburgh 614 miles. The rates, prior to the 5 per cent. advance, were, on first class, 50 and 56½; the difference in favor of Boston being 6½ cents, with a 40-mile longer haul. Today the rates to Pittsburgh are, from Boston, 99½ cents; St. Louis $1.36, or a difference of 36½ cents in favor of Boston, despite the fact that the distance is 40 miles shorter from St. Louis, and despite the fact that the New England roads claim that it costs them more to handle traffic than it does the C. F. A. roads. In connection with this exhibit I draw attention to the fact that both cities are great shoe manufacturing centers and are competing for trade at Pittsburgh.

"Boston versus Chicago to Buffalo, Boston had an advantage in 1914 of one cent per 100 pounds on first class, despite the shorter distance from Chicago. This has been intensified so that the difference is now 15 cents on first class in favor of Boston. I believe the C. F. A. scale of rates as fixed by the Commission are reasonable rates, and that the rates from Boston are unreasonably low. I also think there is ground for complaint from the whole C. F. A. terri-

tory about rates to western termini points versus reasonably
1329 low rates from New England.

"I am informed that on the last exhibit the distances Chicago to Boston and Chicago to Buffalo are transposed. They should be reversed. I can have a new exhibit prepared, or the change can be made on the record.

"I present Exhibit No. 183, which is a statement showing present class rates from points in New England versus points in C. F. A. territory to Trunk Line territory for similar distances; these rates not being made upon any scale from either New England or from C. F. A."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 183, Witness Maxwell.

The witness continued:

"From Boston to Williamsport, Pa., the distance is 461 miles; the first class rate, 80½ cents; from Columbus, Ohio, 402 miles, rate $1.18—difference in favor of Boston, 38½ cents.

"To Baltimore, Md., distance 412 miles, 87½ cents; Alliance, Ohio, to Baltimore, 415 miles, $1.09; difference 21½ cents, first class.

"To Harrisburg, Pa., an important city, from Boston, 402 miles, 80½ cents; Zanesville, Ohio, 405 miles, $1.13½ *cents;* 33 cents against Zanesville.

"Rochester, N. Y., distance 409 miles, 83½ cents; Defiance,
1330 Ohio, 399 miles, 98½ cents; difference 15 cents.

"Altoona, Pa., distance 533 miles, 99½ cents; Indianapolis, competing for the trade there, 504 miles, $1.17; difference 17½ cents.

"Syracuse, N. Y., from Portland, Maine, 400 miles, 95 cents; from Detroit, 388 miles, $1.07.

"Harrisburg, Pa., from Portland, 510 miles, 95 cents; from Toledo, 510 miles, $1.20; difference 25 cents

"To Altoona from Portland, versus Chicago: Portland, 636 miles, 99½ cents; Chicago, 585 miles—considerably less distance, rate $1.26; difference 26½ cents.

"Rochester, N. Y., from Portland, Me., 481 miles, 95 cents; Fort Wayne, Indiana, to Rochester, 468 miles, $1.05; difference 10 cents.

"I present Exhibit No. 184, which is a statement showing where differences in rates in former adjustments, also fixed differentials between important commercial centers and important territories, have been increased under various decisions."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 184, Witness Maxwell.

The witness continued:

"First, St. Louis-Chicago to New York, prior to the Five Per Cent
case the difference was 12½ cents. It is now 26½ cents.
1331 From Chicago-Detroit to New York, the difference first class was 16½ cents in favor of Detroit and it is now 34½ cents.

Between Detroit and Toledo and Chicago, no difference. That is, there was no difference. The difference is now 3½ cents."

Asked what this exhibit goes to show in connection with New England, the witness said:

"It goes to show a very important thing, in my opinion. I would like to read the next one, if I may be pardoned.

"The Chicago versus St. Louis to Missouri River difference, first class, prior to General Order 28 was 20 cents and now is 33 1/3 cents. This same difference applies to all the territory comprising the States of Kansas, Nebraska, South Dakota, Oklahoma, Texas, most of Arkansas, Iowa and Missouri. The old 20-cent differential applied to almost the entire west, Chicago over St. Louis, was considered paramount, and Chicago protested vigorously both to the Administration and the Commission about any increases in the differentials, but without avail. Had the differentials Chicago versus St. Louis been maintained and not increased, a vast sum of money would have been lost to the carriers.

"In other words, other sections of the country where these differential situations exist, or arbitraries over New York, have stood their share, and the carriers have obtained the full advances. In
1332 other words, New York and Boston, competing for trade; the rate from one place is advanced 110 per cent, and from the other 100 per cent; Chicago and St. Louis, competing for the trade in the West; difference always 20 cents, and now 33 cents, and so on. Chicago and St. Louis competing for trade down here, or in the opposite direction; difference 20½ cents; now 26½ cents.

"In other words, in other parts of the country these established differences or arbitraries have not been held sacred like the so-called New York—If the carriers are going to get the increase and distribute it around where needed, and not fall short, at least there would have to be some changes made, so that as the distance of haul increased there would be some fair relative increase in the rate, and not fail to apply any increase on a part of the haul."

Witness hoped to make it clear that these differentials did not bear any part of the 5, 15, 25 or 40 per cent increases. If they had borne those increases, they would have been increased by 110 per cent.

Asked, from his testimony and these exhibits, to give his summary of this New England rate situation, the witness said:

"First. It is evident that the New England roads have
1333 failed to receive a large sum of money on the local traffic by not putting into effect the Anderson scale in full.

"Second. That the putting into effect of this scale to the Hudson River would have resulted in marked advances between Trunk Line territory and New England and would have benefited both New England and Trunk Line roads. I mean, putting it in as minimum rate —any rate beyond.

"Third. Exhibits filed—I think Nos. 181 and 182—show that the

carriers failed to get full increases of five, fifteen, twenty-five and forty per cent between New England and the great Pittsburgh group, and that the rates are unreasonable, as illustrated in 99½ cents from Boston to Pittsburgh versus $1.36 from St. Louis to Pittsburgh, and many other illustrations. The Boston-Pittsburgh rate also applies from Portland, Maine, to Pittsburgh, a distance of 761 miles.

"Fourth. From Central Freight Association territory Exhibits 178 shows that the carriers failed to get the full 5, 15, 25 and 40 per cent advances on the eastbound traffic into New England, which amounts to about 80 per cent of the total traffic interchanged. The rates since the 5 per cent case have been advanced in other parts of the territory a little over 110 per cent, whereas to New England the rates have been advanced about 100 per cent. These fail-
1334 ures have depressed the rate structure between New England, on the one hand, and Trunk Line and C. F. A. territories, on the other, and have had a bad effect on all interested roads."

Witness was a member of a committee representing roads in the Eastern territory for the purpose of considering what might be done to remedy this situation.

Asked to tell about it, the witness said:

"First. At a meeting in New York on November 30th, the New England roads announced they would undertake to put the Anderson scale in effect in full to the Hudson River, to be applied as a minimum to points beyond. All that went to the public.

"Second. That the New England and Trunk Line roads would endeavor to cancel numerous commodity rates, many of them on l. c. l. traffic. That is in both trunk line and New England territory. That is all public. It is in the hands of the shippers, and sent out by the New England roads.

"Third. That New England would restrict to Brunswick and Bath the Boston group, which now extends to Bangor, Maine.

"Mr. Campbell stated that the putting in of the New England scale in full to the Hudson River, with cancellation of the commodity rates and the restriction of the Boston group, would result in an
1335 increase of revenue of $3,000,000 to the New England roads.

"Fourth. The New England roads stated they would endeavor to increase the rates for the so-called trip tickets between Boston and vicinity, and would discontinue the use of these tickets outside of that district. Mr. Campbell testified, on page 1239, that this would result in an increase as to the New Haven of about $500,000 per year.

"Fifth. The New England roads announced that they would renew their application for an increase in mail pay, which, if granted, would give them $1,160,000.

"Sixth. The New England roads stated they wished to increase the lighterage charge on short haul traffic if the Trunk Lines would cooperate, which they agreed to do. It was estimated that this would

bring an increase of about $300,000 to the New Haven; the other roads making no estimate.

"Seventh. The New England lines suggested—this suggestion was from the New England roads—that arbitraries from C. F. A. and Western termini to New England be increased 40 per cent, which would result in increases as follows:

"From C. F. A.	3	2	2	1½	1	1	..
"From Pittsburgh	..	2	1½	1	1	1	1
"From Buffalo	2	2	1	1	1	..	..

"I think it is conservative to estimate that on this there
1336 would be an increase of $1,250,000—very conservative. This would come about by adding even one cent on all the business. If it was added on all trunk line territory it would be a good deal more.

"Eighth. The Trunk Lines agreed to undertake to increase the rates from Trunk Line territory to the Hudson River to whatever extent the Commission might sanction, so as to meet the objection of the New England shippers.

"Ninth. I estimate that the application of the Anderson scale—and this was not in that proposition—as a minimum between Hudson River and New England would result in an increase to the New England lines of about $250,000 each."

Asked whether any other suggestions were considered at that meeting, the witness said:

"Yes. It was proposed in this emergency that there might be some increase in the westbound rates from New England over New York—I don't think that proposition came from the New England roads; it was from some of the other lines—but the New England lines were not willing to add anything to the westbound rates."

Asked what suggestion or recommendation he has to make, the witness said:

"I think the Anderson scale should be put into effect in full, and the same plan followed as in the C. F. A. revision case, I. & S.
1337 No. 965, Rochester Depression, and as late as August 24, 1920, when the C. F. A. scale, changed to 10 classes, was put in effect in Illinois territory, resulting in increases in the rates in Illinois between points on the west bank of the Mississippi River, making those rates higher than rates to points beyond.

"The Interstate Commerce Commission authorized increases in the rates to points in Iowa and Missouri beyond the west bank of the Mississippi River, so as to clear the rates to points on the west bank. They authorized us to put those in. We did not get that agreement through. It was made down here about the 22nd of July. We had to go three times to the Illinois Commission, and it was not authorized until some time in August. We put the rates in on the 24th of August, and also raised the interstate rate on one day's notice.

"As a foundation for the advances in Ex Parte 74, if this plan were followed it would make some increases in the rates between New England and Trunk Line territory. As illustrated in Exhibit 179, the rate Boston to Philadelphia, first class, is 74 cents; whereas the Anderson scale rates as a minimum between New England and the Hudson River would result in a first class rate of 87 cents, even applying that as a minimum.

1338 "Second. The rates on the first four classes from some points in the Trunk Line territory to the Hudson River are low as compared to the Anderson or C. F. A. scale. Some prompt revision should be made in these rates to the Hudson River, so as to satisfy the complaint of the New England people. Some such scale similar to the Anderson and C. F. A. scales, both of which have been fixed as reasonable rates, might be applied at least on the first four classes.

"I was only suggesting there, as a hurry-up job, that they should increase the rates up to the Hudson River. I think they should make a complete revision in Trunk Line territory. If I were in New England, I would complain if they did not raise the rates to the Hudson River.

"Third. Rates between New England and Trunk Line territory are very low as measured by the Anderson scale or C. F. A. scale; this being clearly shown by Exhibit 179. This is very significant in Exhibit 180, from Boston versus St. Louis to Pittsburgh.

"Fourth. Arbitraries eastbound from Central territory to New England. Full increases authorized by the various decisions, 5, 15, 25 and 40 per cent., were not made to New England, resulting in increases approximately 100 per cent. since 1914 in the rates to
1339 New England, as against approximately 110 per cent. elsewhere. It seems reasonable that at least some of the increases recommended by the New England traffic officers and those of other roads should be made in these arbitraries.

"Fifth. Westbound rates from New England. I hesitate to make any expression on that, because of the strong sentiment of the shippers and New England railroads against any increases, but the wide groupings appear to be wrong. To illustrate, the rate first class to Cleveland, Ohio, is, from New York, 576 miles, $1.12½, and from Bangor, Maine, 866 miles, $1.12. There is no parallel for such rate-making, so far as we can find, anywhere in the United States.

"I present another exhibit to illustrate that point."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 185, Witness Maxwell.

The witness continued:

"Exhibit No. 185 shows the rates from Bangor, Maine, to Cleveland, 866 miles, first class $1.12, with rates for somewhat similar distances and between important commercial centers in various parts of the country.

"Cleveland to Kansas City, 791 miles, $2.08, against $1.12 for 866 miles.

"The rates from all these points will average 85 per cent. higher than the rate Bangor to Cleveland. Either the Bangor-Cleve-
1340 land rate is unreasonably low, or the other rates are unreasonably high; and I am satisfied from the showing being made by the railroads that the former is the case. Such fearfully low rates are a burden, not only to the New England roads, but all connections west of the Hudson River, and unless such rates are increased, the burden must be carried elsewhere if the railroads are to succeed.

"These are commercial centers and similar distances. You can pick them out anywhere. I do not care where you go.

"I refer also to Exhibit No. 182, rate to Pittsburgh, first class, from Boston, 654 miles, 99½ cents, versus St. Louis to Pittsburgh, $1.36 for 614 miles.

"It must be borne in mind that this same rate of 99½ cents to Pittsburgh also applies from Portland, Maine, to Pittsburgh, a distance of 761 miles,—another evidence of the wide grouping and unreasonably low rates as compared with rates other shippers must pay to reach the competitive markets.

"I do not believe the New England people are aware of the great advantages they enjoy in these rates. Certainly the shoe manufacturers will not claim that they need a less rate to get into the Pittsburgh territory than the manufacturers at St. Louis, and I believe they would be willing to pay about the same basis of rates as their competitors.

1341 "I do not believe that even some of the railroad people are aware of this situation. Mr. Campbell testified, on page 1169 of the record, as follows:

"'A rearrangement of Eastern territory upon this basis would not create a rate situation differing greatly from that which has for many years existed and is in vogue at the present time, i. e., C. F. A. territory having a lower rate level than either Trunk Line or New England.'

"This evidence that I have given clearly indicates that the C. F. A. rates are on a higher level than in New England. Prior to September 20, 1917, the C. F. A. rates were the lowest in the United States and, I believe, in the world, as well as the most illogical and discriminatory as between shippers and communities. I think the situation is reversed, and that New England and, I believe, Trunk Line territory, within itself, now can carry the honors for a crazy rate structure and for low ones. They now carry the honors in that respect so far as eastern territory is concerned.

"I also think that the C. F. A. shippers have grounds for complaint of discrimination in rates in favor of New England, not only to the Western termini points, but into Trunk Line territory, as shown by Exhibit No. 183; also about such rates as shown from Bangor, Maine, to Cleveland, for 866 miles, which the C. F. A. shippers have to pay for a 540 mile houl to reach Cleveland."

1342 Asked whether he suggests a general increase in rates, the witness said:

"No. I suggest that, where the rates are unreasonable low and prejudiced as compared with the Anderson scale and the C. F. A. scale, as shown in Exhibits 179 and 180, and rates actually in effect elsewhere in the Eastern territory, as shown in Exhibit No. 183 (that is the exhibit into Trunk Line from New England, versus C. F. A.), they should be brought to a reasonable level with the rates other shippers are paying in Eastern territory. The remedy lies in a readjustment of these unreasonably low rates, rather than in an increase in the existing divisions."

Asked whether he desired to make any comment on the decision of the Interstate Commerce Commission in the New England case, I. C. C. Docket 9952 (49 I. C. C. 421), Proposed Increases in New England, page 455, the witness said:

"Investigation of the cost of handling less than carload business in the Trunk Line territory was made during the fall of 1918, since which time many material increases in wages have been made. That investigation indicated that a first class rate of 44 cents for 5 miles was needed to cover terminal costs, whereas the present first class rate in New England for 5 miles is 35½ cents. It took 44 cents
1343 to cover the terminal.

"The New England lines claim higher terminal costs in connection with this class of traffic, and that their terminal costs are higher than in other parts of the territory. It therefore appears that they still might make, to advantage, a study of the terminal cost on these formulas.

"During the cross-examination of Mr. Alfred, Mr. Choate referred to the fact that about 18½ per cent. of the tonnage handled by the New Haven was less than carload traffic. In view of the fact that this is relatively a so much larger volume of the total traffic than the average of the roads in Eastern territory as a whole, and of the fact that the rates to the Hudson River beween Trunk Line territory and New England, and in other parts of the territory, especially on the first four classes of freight, are far below any reasonable scale for Eastern territory—Anderson or C. F. A.—also below rates not directly fixed by scales as illustrated in Exhibit 163, into Trunk Line territory versus C. F. A., it appears that the New England lines have an opportunity to greatly help themselves and the trunk lines by putting in reasonable rates, and that the New England shippers cannot, in fairness, object to such action.

"The C. F. A. roads failed by a substantial margin to get 40 per cent. increase in their freight revenues under Ex Parte 74,
1344 because of the large volume of inter-territorial traffic and because on a material part of the traffic west of the Indiana-Illinois state line the increases were governed by the increase accorded the western roads in Ex Parte 74, namely, 35 per cent.

"For these reasons the C. F. A. roads have not any spare funds, and from present indications many of them have to struggle to meet their fixed charges.

"In view of these conditions, and the further reason that I believe the money should be obtained through raising the unreasonably low rates to a reasonable level, rather than through a change in divisions, I present these suggestions in the most friendly spirit, with the hope that relief may be found out of the present difficulties in some such manner as suggested."

Asked whether his testimony rather tends to suggest that if the New England lines are in need of relief and their divisions are unjust and unreasonable, certainly the Central Freight Association lines should not be compelled to bear any proportion of them, the witness said:

"I show how poor we are and have been all these years and we have gotten nothing, except since September 1st, out of the revised rates and their income is right up to September 1st. Their return on property investment was much greater than ours, and it
1345 has been shown how much less we have gotten under the inter-territorial rates than New England; also through the failure of the States to grant us increases promptly, and we haven't anything to spare and it is a bad situation. And I really think that every means where we find rates that are unreasonably low and below schedules fixed by this Commission, should be adopted to remedy the situation. Nobody can object to their being brought to some such level, and we should promptly get some means to keep this New England machinery going."

Witness is willing to admit that those lines are important to the public. They want to keep them going and coming along and earn something on the property investment, but he thinks they have got to seek other means.

Witness continued:

"That these New England people have not paid the bills is shown here. The rates today are exceedingly low into this trunk line territory and many other sections and way below what other people are paying; and if I were a commercial representative at St. Louis or Chicago, I would not hesitate a moment to bring complaint; and I think the railroads will have to do it if they do not get action on this sort of thing. I do not believe the New England people or the shippers realized what advantage they had. I guess we are
1346 both giving it away. We had better both get at it and work something out."

Cross-examination:

Asked whether he did not understand when the case was begun that the New England lines stood ready to do everything they could to help themselves, outside of increased divisions, witness replied that he thought the processes were awfully slow: "Of course our trunk lines may be somewhat to blame for that".

The New Haven Road put the Anderson scale into full effect, and did not have the cooperation of the other people. By the "other

people" witness means the Boston & Maine and the whole of them. Witness thinks the trunk line cooperation was not necessary.

The rates were under the control of the Government up to the first day of March. Then neither the Trunk Line nor the New England committee had anything to do with it. For the next six months they had to stand still. That brought it up until about September 1st of this year—until this rate structure was in. Whatever was then being done was being done by the Corporate Traffic Committee. Complainants had from September 1st on. Their meeting was the 30th of November. They had that much time in which to undertake this. Witness would much rather have the consent of the Trunk Lines to raise these rates beyond.

Witness is aware of the conferences during the summer when New England asked the cooperation of the Trunk Lines on the raising of subnormal rates. There has been a lack of cooperation. New England has wanted them to come along on these rates. The Trunk Lines have been slow about it. Witness has never seen where they did much. If the New England scale is put in effect and the
1347 trunk lines cooperate and raise their rates correspondingly on their side of the river, it will help both. If the trunk lines will co-operate with respect to the subnormal rates in New England, of which witness has complained, it will also help the Trunk lines. Witness thinks they will co-operate now. That will furnish another source for increased divisions, but witness does not know how soon.

At the meeting of November 30th witness understood that the New England lines agreed to cooperate in an application for increased eastbound divisions.

For witness' Exhibit No. 185 he selected some first class rates. The situation is relatively the same on the first four classes.

Witness assumes that first class includes less than carload traffic.

Witness thinks that shoes move into central territory under first-class rates. If they do not move under first class rates into New England, they ought to. He does not know whether these rates apply to shoes or not. He does not believe any wool moves on those rates, or cotton or leather. He believes this is relative, though, on the commodities and all the classes.

Witness thinks his Exhibit 184 indicates that wherever rates were based on a percentage difference, or where they were based on actual distance, as Chicago-St. Louis to the West, Chicago was obliged to pay its full share of the increase.

Boston got, on all these advances, about 10 per cent less
1348 than other parts of the country. This exhibit applies to all six classes. Another exhibit introduced by this witness shows commodity rates. In exhibit 183 witness picked out the places to show an illustrative comparison. Asked whether he has had any other study made than these few sheets to compare the rates in New England with the rates in Central Freight Association and Trunk Line territory witness replied: "Yes, I didn't want to burden this record."

Asked whether the rates in New England are quite as high, all

through, on a general average, a general scale, as they are in Central Freight Association territory, the witness said:

"You failed to get your Anderson scale, and that has caused quite a shrinkage as compared with our scale. I think that your Anderson scale, if you fill it out, you will have a little higher local freight rates than we have."

When the New England rates come over into Trunk Line territory, they are vastly below C. F. A. rates. Witness thinks the C. F. A. rates are a little above the trunk line rates now. There is no logic whatever in the trunk line rate structure. A man will pay 29 cents for carload freight for 200 miles, and a man alongside of him in the same locality will pay 14 cents. That is the situation in the trunk line territory.

Referred to his Exhibit 177, the witness said that the figure of $582,967,954 for property investment of the five Central Freight Association roads that he figured is the test period valuation. In Witness' Exhibit 172, he included Baltimore & Ohio and Erie and C. F. A. lines, and by doing so he greatly increased the deficit of the C. F. A. lines.

1349 In his Exhibit 177 he could not fairly include these lines in C. F. A. territory, because they were in both trunk line and C. F. A., and he could not divide them. They were not divided in Exhibit 172. They simply put them in there to show what the effect would be if they were put over into C. F. A.

He could not separate them because their operations are not separated.

Redirect examination:

Referred to his Exhibit No. 173, the witness said that the so-called Pocohontas lines have a pretty large mileage in Central Freight Association territory. To the extent of that mileage they would receive the 33⅓ per cent shown there, instead of 40 per cent. In other words, the exhibit would be better if the word "Pocohontas" was taken out.

The statement supplied by Mr. Hildum was received in evidence and marked Complainants' Exhibit 186, Witness Hildum.

WALTER YOUNG, called as a witness on behalf of the defendants, testified:

Direct examination:

1350 That he is general traffic manager of the Atlas Portland Cement Company, and not an officer of the Northampton & Bath Railroad Company. The Atlas Portland Cement Company controls the Northampton & Bath Railroad Company by ownership of the stock. It is customary for witness to take charge of matters relating to the division of through rates between the Northampton & Bath Railroad and its connections.

Witness' experience with cement rates extends over a period of 20 years, and prior to 1900 he had about 7 years' experience on freight rates generally.

The Northampton & Bath Railroad operates a line from Northampton, Pa., where it connects with the Central of New Jersey, easterly to Bath Junction, where it connects with the Lehigh & New England Railroad and the Lackawanna Railroad, a distance of about 7 miles. Practically all of the traffic on the Northampton & Bath Railroad moves from or to Navarro, Pa., which is at the westerly end of the line, near the connection with the Central Railroad of New Jersey, and about 7 miles from the connection with the Lackawanna Railroad and the Lehigh & New England Railroad.

Traffic from the Northampton & Bath to points in New England is practically speaking exclusively cement, and moves from Navarro in carload lots. The volume of the movement of cement from Navarro to New England is about 1,000 tons per day, some-
1351 where from 200,000 to 250,000 tons per year. The cement industry does not work a full year, practically 8 months.

About 85 per cent of the 200,000 tons a year goes to destinations on the New Haven and the Boston & Maine railroads, together, and about 15 per cent to destinations on other roads.

Out of the through rates on cement to New England, the division received by the Northampton & Bath Railroad is $3 per car, which is equivalent to 7½ cents per ton on a 40-ton car, which is about the average loading on cement. The division received from the Delaware, Lackawanna & Western and Lehigh & New England railroads is $4.50 per car, or equivalent to 11¼ cents per ton on a 40-ton car.

The movement involved on traffic interchanged with the Lackawanna & Western and the Lehigh & New England railroads is 7 miles. For a period of 6 months, ending August 31, 1920, the cost was about $3.65 per car on traffic interchanged with the Central Railroad of New Jersey, against an allowance of $3 per car. On traffic interchanged with the Lackawanna and the Lehigh & New England Railroad at Bath Junction the cost was $5.50 per car, contrasted with an allowance of $4.50 per car, received as a division.

For several years past the Northampton & Bath Railroad
1352 have been operating continuously at a deficit. At the present time the deficit is running about $10,000 per month. The Northampton & Bath Railroad does not perform any plant facility service for the Atlas Portland Cement Company. It is all common carrier service. The plant service for the Atlas Portland Cement Company is performed by that company with their own power and crews.

The allowances or divisions received from connecting lines, apply uniformly to all classes of traffic, inbound and outbound. And the costs witness referred to apply to all classes of traffic, inbound and outbound. The same costs apply to cement outbound as apply to inbound coal. It is all handled alike, in the same trains, in the same manner and the same distance to each junction.

The cement shipped from the Lehigh district into New England is about 3 per cent of the total merchandise traffic interchanged

between trunk lines and New England lines. It would be a considerably larger percentage of the eastbound merchandise traffic.

The 200,000 tons of cement shipped from the Northampton & Bath Railroad into New England in 1919 was about 1 per cent of the total merchandise traffic interchanged between the trunk lines and the New England lines. It would be about 2 per cent of all the New England-Trunk Line interchange traffic east-
1353 bound.

The traffic originated by the Northampton & Bath is equal to about 6 2/3 per cent of the combined southern and western traffic moving into and out of New England.

Of the cement from the Lehigh district, 368,132 tons, or 60 per cent., was destined to points on the New Haven System, and of that tonnage 77 per cent. moved via the Maybrook-Poughkeepsie Bridge route, and 23 per cent. via the Harlem River route. 151,410 tons, or 25 per cent., went from the Lehigh district to destinations on the Boston & Maine, and of this amount 76 per cent. moved via the Delaware & Hudson, Mechanicsville and the Boston & Maine, and 24 per cent. moved via Maybrook and the Poughkeepsie Bridge route. There were only two cars that moved from the Lehigh district during that year from all mills in the Lehigh district to destinations on the Boston & Maine Railroad that traveled via the Jersey City-Harlem River route.

Cement is classified under the classification in the sixth class.

Statements were received in evidence and marked Defendants' Exhibits 187, 188, 189 and 190. Witness Young.

The merchandise divisions do not apply on anthracite coal or bituminous coal.

Rates on cement from the Lehigh district to points in New
1354 England are very materially lower than the rates on all other commodities of similar transportation characteristics, including anthracite coal.

The divisions accruing to the New England lines and to the lines west of the Hudson River on cement are correspondingly lower.

Witness has recently made a study of railroad operating costs of the trunk lines and the New England lines, and has made studies time and again in the past, and it is his opinion, from his experience as a traffic man and his studies of railroad costs, that the divisions accruing to the lines west of the Hudson River out of these cement rates, including the trunk lines proper and the Northampton & Bath, are not of sufficient volume to permit any greater allowances to the New England lines than are now being made.

The purpose of his exhibits is to show that if the New England lines want any increased divisions on that cement traffic, it can only come in one way, and that is by an increase in the rates to a normal basis.

Asked concerning the history of this subnormal cement rate, the witness said:

"I have here a memorandum that will take me about two minutes

to read, which will give the history of the present cement rate structure applicable from the Lehigh District into New England.

1355 "Some 25 or 30 years ago, when the cement industry in the Lehigh district, in the eastern part of Pennsylvania, began to develop, there was a rate in effect eastbound on cement from Chicago to New York of $4.40 per ton, and to all Boston rate points, $4.00 per ton; this eastbound rate having been established to equalize the rate westbound on imported cement.

"The establishment of the eastbound rate, Chicago to New York, $4.40 per ton, and to Boston and Boston rate points, $4.00 per ton, had the effect of creating a rate from Dunkirk, New York, and Erie, Pennsylvania, both 60 per cent. points, to New York City, of $2.40 per ton.

"Under the usual method of figuring rates from Buffalo to New York, a differential of two cents per 100 pounds, or 40 cents per ton, had been used generally and for a great many years. Consequently the rate from Buffalo to New York was $2 per ton, and to this was added the usual differential of two cents per 100 pounds, or 40 cents per ton. The usual differential Buffalo to Boston rate points versus New York to Boston rate points, had the effect of making the rate from Buffalo to Boston $2.40 per ton.

1356 "However, at the time the Chicago-New York basis was applicable certain minima were exacted, and the records show that Lehigh Valley Railroad tariff No. 2390, effective January 20, 1896, made a rate from Buffalo to Boston of $2.60 per ton. I cannot furnish the I. C. C. number of this tariff, because it is my understanding that it was filed at a time when the carriers were not required to use consecutively I. C. C. numbers.

"Consquently, with these figures in effect, it was decided that from the Lehigh district, over 200 miles nearer to Boston, a rate of $2.25 was justified; this, with the successive general advances that have been made during the past 6 or 7 years, brought this rate from the Lehigh district up to $3 per ton prior to August 26, 1920, and since that time the rate has been $4.20 per ton."

The conditions which called for the establishment of the present basis of cement rates ceased to exist about 15 years ago.

The status of the Northampton & Bath Railroad has been passed on by the Interstate Commerce Commission, and the Commission has prescribed the formula as a basis for maximum permissible allowance to the Northampton & Bath. The maximum premissible allowance would be 65 cents per car higher than it is now re-

1357 ceiving on traffic interchanged with the Jersey Central, and $1 greater than on traffic it is now interchanging at Bath Junction with the Lehigh & New England and the Lackawanna.

The rates between the Lehigh district and New England from witness' plant were involved in a case which the Atlas Portland Cement Company had then pending before the Interstate Commerce Commission, docket number 1110.

Cross-examination:

Witness' road is entirely owned by the Atlas Portland Cement Company.

Adjourned to Monday, January 31, 1921, at 10 o'clock A. M.

1358 Washington, D. C.,
Monday, January 31, 1921—10 a. m.

D. S. BRIGHAM, heretofore called as a witness, recalled and testified further:

Redirect examination:

Asked to comment upon the testimony given by Mr. Hildum, the witness said:

"Mr. Examiner, I wish to read a statement which was made by Mr. Mildum on page 2078 of the record, which, entirely unintentionally on his part, seemed to reflect upon the figures which were used as a basis of the estimates which I had made, and which were somewhat different from those submitted by Mr. Hildum. Mr. Hildum states, in part:

"'I do not know why those figures in all cases were changed, but on six of the New England roads—all of the roads with the exception of the Rutland—the net railway operating income was adjusted because of things which had come to the attention of the New England people after the case had been prepared for the Commission.'

"Again, on page 2081, Mr. Hildum stated:

"'Well, Mr. Brigham has made an unwarranted division. He has corrected his figures after the case was closed.'

1359 "Mr. Hildum further stated that his exhibit was based upon the only detailed figures by individual roads which appeared in the record of Ex Parte 74.

"In Mr. Hildum's testimony he called attention to the fact that the difference between the net railway operating income which was used as a basis for my Exhibit No. 6, and the basic figure which he used was $2,177,867. I simply wish to explain that those adjustments to which Mr. Hildum refers were not intended to cover conditions which had developed after the case was closed.

"In Ex Parte 74 there were orginally no figures for individual roads submitted. The Committee which prepared the data in that case submitted a general figure for the Eastern district showing what the needs would be. That general figure was obtained from the sum of the questionnaires of the individual roads. Then, after those questionnaires had been received, certain important developments occurred which it was believed should be reflected in the information laid before the Commission, and to the needs of the Eastern roads, which were reflected in the aggregate of the questionnaires. Mr. Shriver, the Chairman of the Eastern Accounting Committee, added certain other adjustments which aggregated about $94,000,000.

"The adjustments to which Mr. Hildum refers were an at-
1360 tempt by the New England roads to assign to their own roads the proper proportions of these adjustments, and not an attempt to add something which was not considered in the case.

"The most important of the adjustments was that of coal, which had increased considerably after the questionnaires were submitted, and to indicate that that condition was before the Commission I desire to call attention to the record in Ex Parte 74, answer No. 1 to the 13 questions propounded by Chairman Clark on May 28, 1920.

"In that answer a statement was presented of the increased cost of coal to the principal carriers in the Eastern district, based on 1920 contracts, as compared with the average for the calendar year 1919. That statement indicated that for the 8 New England roads the increase per ton over 1919, including the 30 per cent. increase in freight rates, was estimated to amount to $2.27 per ton, whereas the balance of the Eastern lines, not including New England, showed an increase of 99.4 cents per ton.

"Now, the position of the New England roads was that in prorating this $94,000,000 it was only reasonable that that should be prorated, as nearly as possible, to the roads on the basis on which they had contributed it, and as information was furnished to Mr. Shriver from time to time in the early months of 1920 as to
1361 these new conditions, the New England roads each added to their own figures what they considered was their proper prorate of these adjustments.

"In another one of the 13 questions propounded by Chairman Clark in Ex Parte 74, namely, Question No. 4, a statement was submitted, showing the detail of the application adjusted by individual roads. It is upon that statement that Mr. Hildum bases his Exhibit No. 126, and in the absence of other data it is, of course, entirely proper for him to do that; but I desire to call attention to the fact that in the footnote on this exhibit to which I have referred there is a note against the column entitled 'Further adjustments developed subsequent to October 31, 1919,' which reads:

"'Distributed among the several railway companies in proportion to their operating expenses.'

"In the same record is found the reply of the Eastern roads to Question No. 1 propounded by Chairman Clark on June 1, 1920. That question inquired as to the amount in excess of 6 per cent. which would be earned by the individual roads on the basis of the data submitted. In that statement a similar column is shown, indicating the adjustments developed subsequent to the questionnaire. That is identical with the column to which I have referred in the previous exhibit, and the note on that column is in somewhat more detail. It states:

1362 "'Information not available by roads. Distributed among the several railway companies in proportion to their operating expenses.'

"I am not questioning the fact that Mr. Hildum has prepared his exhibit upon the basis of the detailed figures which appear in the record, but I simply wish to bring out what I think is the propriety

of using, in a case which is so vital to certain roads, the proper proportion of these adjustments which belong to the individual roads, and that is particularly true in the case of the fuel, to which I have called attention.

"I note also that in Mr. Hildum's exhibit, as there were no individual figures shown in Ex Parte 74 for the Boston & Albany and the Rutland, which were included in the New York Central system, he has been considerate enough to accept my adjustments in the case of those two roads.

"I should like also to point out that in all the statements which have been prepared from time to time by Mr. Shriver in connection with the discussion of the New England roads' problems, he has not used the adjustments which appear in the answer to Question No. 1 in Ex Parte 74, but has used a figure considerably larger than that. The adjustments which were used by the 8 New England roads, forming the basis of my Exhibit No. 6, aggregated $11,-
1363 091,212. In statements which Mr. Shriver has prepared, but which in no case——"

The statements by Mr. Shriver referred to in the foregoing have not been submitted to the Interstate Commerce Commission.

Mr. Shriver has from time to time prepared other statements, but they have not been submitted to the Commission. They were not submitted in Ex Parte 74.

The witness continued:

"I may say, Mr. Examiner, that while those adjustments have not, in themselves, appeared before the Commission, in my Exhibit No. 8, which was prepared by the Bureau of Railway Economics, covering the 10 New England roads, the Bureau has used the Shriver adjustments to which I have just referred, and I was intending to explain later that the reason for some differences between my Exhibit No. 8 and the other exhibit was because it was prepared by the Bureau, which in preparing it used those figures which they had used in the past in all statements prepared for Mr. Shriver; so that in a certain sense the figure arrived at from those adjustments is in this record.

"These figures were not submitted to Mr. Shriver. They simply were in statements which he has prepared from time to time for various purposes, showing the relative needs of the New England roads as compared with the rest of the East. He instructed
1364 the Bureau of Railway Economics to assign a certain portion of this $94,000,000 to the New England roads. I do not know how he made up the figure; but he simply made up a figure in which, instead of prorating them arbitrarily on operating expenses, he allowed the New England roads some $2,000,000 more than the arbitrary prorate would result in, apparently making some allowance for this additional cost of coal to which I referred.

"That item of $2,000,000 was made up of a number of adjustments: the mail pay credit, Supplements 24 and 25 of the Wage Award, increased cost of coal, freight charges on coal, etc. There were several items included in that total. I do not know how Mr.

Shriver made it up, and I do not know that he could say now how he made it up.

"I simply referred to that as a further justification for the reason why I had computed the adjustments of individual roads, rather than to take the absolutely arbitrary prorate which was later put into the record.

"In that connection, I think perhaps I meantioned it, but I wish to make perfectly clear that there was not originally submitted by the Eastern Committee a detailed statement of the cost by individual roads. It was only brought into the record at the request of the Chairman, and when done an arbitrary prorate of the $94,000,000 adjustments was made."

1365 Asked concerning the difference between witness' Exhibit No. 6 and Mr. Hildum's Exhibit No. 126, the witness said:

"I think Mr. Hildum explained that correctly—that in his Exhibit No. 126 he included certain additional class 2 and 3 and switching roads which were not included in my Exhibit No. 6. My Exhibit No. 6 was not brought up to date in any way, but was simply a copy of the statement prepared by the Committee of which Mr. Hildum was Chairman last summer. It was considered at the time that it was not essential for the purposes of that study to include all the Class 2, 3 and switching roads. That would account for the difference in the freight and switching revenue."

Asked whether he agreed with Mr. Hildum that the latter's statement to the conference, contained in Witness' Exhibit No. 6, was necessarily for informal discussion, and therefore to some extent incomplete, the witness said:

"Why, I think so. It was prepared for this conference, but so far as the New England roads were concerned we attempted to include figures that we could stand behind; and we had no question but what Exhibit No. 6 fairly represented conditions at that time, subject to very minor changes.

"The quotation which I have read from Mr. Hildum's statement indicated that the New England roads had included figures which had come to the attention of the New England people after
1366 the case had been prepared for the Commission. As I have said, it was not the intention to include anything which had not been reported to Mr. Shriver for use in the case. If it had been intended to bring the matter up to date, a great many other things would have been included. For example, the statement on which my Exhibit No. 6 was based was prepared in August and, of course, at that time we all knew that the increase requested would be approximately 40 per cent., instead of 30 per cent., in freight revenue. That item alone would have increased the fuel cost to New England something over $800,000 more.

"Furthermore, the cost of materials and the price of coal had been increasing since the figures were submitted to Mr. Shriver, but

no attempt was made in the data which formed the basis of Exhibit No. 6 to allow for that condition.

"There was in the record, however, a statement for one of the New England roads which indicated those conditions, and I should like to read into this record a letter which I wrote to Mr. Shriver under date of June 28, 1920, which was filed in Ex Parte 74 by Witness Ekin, Comptroller of the Baltimore & Ohio Railroad, as his Exhibit No. 1-A. This letter is addressed to Mr. Shriver. (Reading:)

"'DEAR SIR:

1367 "'You will recall that last week I gave you a statement of the increased cost of certain important items of material other than coal based on June 1st, 1920, prices, as compared with the average for the year 1919. The percentage increase in one case was over 70 per cent. and averaged 43 per cent. This appeared to be high, but I have since gone over this very thoroughly with our Purchasing Agent and he assures me that the current prices given are conservative and are based on the results of competitive bidding. These nine items alone tend to increase the estimated deficit of the Boston & Maine by over $1,600,000. Taken in conjunction with the further increase in fuel based on contract prices and not on "spot" prices, the percentage increase in freight revenue needed by the Boston & Maine has increased from 35.5 to 42.2."

"That is based on the present application of 30 per cent. (Reading:)

"'Expressed in another way it means that the estimated net income which a 30 per cent. increase in freight rates will give the Boston & Maine is reduced from an amount equal to a return of 5 per cent. on its property investment, to 3.7 per cent.

"'While this is a serious matter for the Boston & Maine, it occurs to me that the same condition must be true to some extent
1368 elsewhere in the case of materials other than coal, and that a 30 per cent. increase in rates may prove to be inadequate for the east as a whole. I realize that it is too late to do anything in the present proceedings other than justify the figures which have been submitted, but the prospective decision of the Labor Board will necessitate further increases either in freight or passenger rates, and we might then have an opportunity to present evidence to the Commission which would indicate that the questionnaire figures do not properly reflect the increased cost of materials.

"'One point which perhaps has not been given sufficient weight is the fact that the expenditures for materials during the year 1919 were considerably below normal so that we have not only the increase in unit prices during the past six months to consider but also the fact that on many roads these unit prices would be applied to a volume of material much greater than that applied in 1919.

"'I am attaching copy of statement showing price increase on the Boston & Maine. I have asked the New Haven to prepare something similar. If it has not already been done, would it not

be well to obtain similar information for some of the larger roads in the East? The prices on attached statement are f. o. b. this line but do not include any allowance for increase in freight rates.
1369 As the Trunk Lines are nearer the source of supply of many of these items of material, the element of freight rates would be a smaller proportion of the total unit cost and therefore the percentage of increase of these unit prices would naturally be expected to be greater than on the Boston & Maine.'

"That is signed, 'D. S. Brigham.'

"The nine items referred to in the foregoing letter were rail, ties, hard pine lumber, car oak, cast iron wheels, bar iron, gray iron castings, composition castings, and journal bearings—items of both maintenance of way and maintenance of equipment supplies. That statement, in detail, as well as the letter, was filed by Witness Ekin in Ex Parte 74.

"In view of Mr. Bikle's objection, I will not attempt to discuss the differences in my Exhibits Nos. 7 and 8, as they both involve some reference to the points to which he objects.

"On page 2088 of the record Mr. Hildum has attempted to analyze the difference between the 1.2 per cent. appearing on his Exhibit 126 and the 1.48 per cent. which appeared on my Exhibit No. 6. That difference was .28 per cent., and I have no exception to take to the statement that the correction of the net railway operat-
1370 ing income in the Brigham exhibit to the actual figures which went into the case brings the per cent. from 1.48 down to 1.358, except to refer to my previous statement as indicating the propriety of the adjustments which were used on Exhibit No. 6.

"He does state, however, that the exclusion of the 93 Class 2, 3 and switching companies makes a difference of 1.42 per cent., account for about half of the difference between the two exhibits. I tried to verify that, and the same representatives of the Bureau of Railway Economics who prepared Mr. Hildum's Exhibit No. 126 has gone over it carefully, and it appears that the exclusion of those roads accounted for only .03 per cent. of that difference, instead of 1.42 per cent. I did not discover that fact until after Mr. Hildum had left, so I haven't had an opportunity of checking it with him; but it surprised me considerably that those unimportant roads, relatively, should make such a difference when they were added to both sides of the computation, and so far as I have been able to find they do not account for a very large part of the difference.

"The third one was the fact that the Boston & Albany was omitted from one statement. That was very slight, and I do not question that.

"In summing up I wish to call attention to the fact that the Commission in Ex Parte 74 had information as to the arbitrary
1371 nature of the prorating of these adjustments between individual roads, as indicated by the footnotes on the answers to the questions propounded by Chairman Clark; that the Com-

mission, further, had a separate statement submitted, showing what the increases in prices of coal had been in New England and the other districts, which were reflected in Mr. Shriver's adjustment of, I believe, $54,000,000; that the Commission also had before it statements submitted by the Boston & Maine in regard to further increases in the cost of fuel and materials since the case was submitted, which affected very considerably the showing which the Boston & Maine made, as compared with the individual record.

"Furthermore, the Commission had before it a supplemental statement filed on behalf of the 7 complainant New England roads under date of May 3, 1920, and this statement showed the aggregate needs to yield 6 per cent. on the property investment of these 7 New England roads to be $60,244,377, which is approximately the same figure submitted on my Exhibit No. 8, namely, $61,200,078. There had evidently been a slight correction of $44,000 between that period, and that figure of $61,200,078 is derived from my Exhibit No. 6 by the elimination of the Boston & Albany, the insertion of the New Haven's claim for 6 per cent. on their $40,000,000 investment in New York terminal properties, and the inclusion of the Main Central System lines, with an aggregate property investment of about eight and a half million dollars, which were omitted from my Exhibit No. 6, and also, which I note, were in Mr. Hildum's Exhibit No. 126 inadvertently included in the other lines of the Eastern group outside of New England.

1372

"I wish to call attention to a statement by Mr. Williams which appeared on page 2172 of the record. Mr. Williams took Cunningham Exhibit No. 29, and also the informal statement submitted by the New England roads to the Commission at a hearing early in November, and by a rather ingenious computation from those two exhibits developed the fact that the average cost of fuel to the New England roads in 1916 was 48 cents per ton. I do not suppose he intended to imply that that was the cost, but the only other inference would be that either Cunningham Exhibit No. 29 or the informal statement of the New England roads was wrong. That informal statement has not been submitted as an exhibit in this case, but Mr. Williams read into the record certain figures from it.

"Cunningham Exhibit 29 was simply intended to illustrate the comparative prices of coal in New England and Trunk Line territory. Prof. Cunningham applied the average price of coal for the first eight months of 1920, which was by no means the average for the year, to the tonnage of 1919, which was very much lower than either 1920 or 1916. So that the total of $28,000,000 shown on Exhibit Cunningham No. 29 has no reference whatever to the actual cost of coal for the year 1920.

1373

"In the informal statement referred to it was stated that for the New England roads as a whole the cost of coal had increased $25,000,000 over 1916 and $13,000,000 over 1919.

"Mr. Williams' computation was obtained by comparing the $28,000,000 on Prof. Cunningham's exhibit with the $25,000,000 shown in the informal statement. Since this informal statement was prepared, we have obtained from the 7 New England roads the

actual cost of locomotive fuel only in 1916, 1919 and for 1920, which is based on actual figures for 10 months, with the remaining 2 months estimated. The sum of those figures indicates that in 1916 the total cost of locomotive fuel was $15,892,031; in 1919, $21,767,132, and in 1920, $39,931,055. Those figures indicate that the increase of 1920 over 1916 was $24,039,024, and that the increase of 1920 as compared with 1919 was $15,163,923, which are very close to the estimated figures used in the informal statement."

1374 Witness in making up his figure of the increased cost of coal did not include water-borne coal in the base on which he computed the 44 per cent. increase of rates. The increased cost of freight charges shown on one of witness' exhibits was based on the rail rate only. So far as any charges within New England were concerned, the only important item would be as between the Central New England and the New Haven, and an elimination was made from the figures for that. The coal cost was not inflated by including water-borne coal or rail charges within New England.

Recross-examination:

Asked whether he agreed that Mr. Hildum's Exhibit 126 ties up exactly with the figures submitted to the Interstate Commerce Commission, the witness said:

"With certain limitations. In arriving at the final totals in Mr. Hildum's exhibit, he has made an arbitrary prorate of the effect of the Labor Board Award on the different roads, and I have been unable to find that that is any matter of record with the Interstate Commerce Commission. So far as the Boston & Albany and the Rutland go, I referred to that. Otherwise, it ties up with the details
1375 which were submitted in answer to Chairman Clark's questions."

The changes that Witness' Exhibit No. 6 made in the statement prepared for the use of the executives in their consideration of the situation were made in the New England figures. No similar changes were made in the figures applicable to the other lines so far as witness knows.

The property investment of the Class 2 and 3 roads, which were omitted from Witness Exhibit No. 6, was slightly more than $200,000,000. The inclusion of those roads changed the net income, witness believes, about $1,000,000 in the whole Eastern group.

The aggregate net railway operating revenue of these omitted Class 2 and 3 roads was about $100,000,000. The Class 2, 3 and switching roads together appear to have needed about $11,000,000 additional to yield 6 per cent. That was prior to the Labor Board's award. To that extent they increased the gross amount of money necessary to be raised in the group.

In restricting the 40 per cent. increase on the cost of fuel to the all-rail tonnage, witness considered as all-rail whatever moved in

that period. He did not consider the matter from the viewpoint of the future, except as based on the constructive year.

During the constructive year a much larger proportion
1376 moved by water than complainants' lines should have liked to receive. Witness means the constructive period ending October, 1919.

The amount moving by water was much less than when you go back of the year 1915. On the present relation of rail and water coal, whatever coal they might get this year by water would cost them more on their rails than the rail coal. In other words, they are anxious to get back to a larger proportion of water coal, as a matter of relieving the western gateways, but so far as the yard price goes, the water coal is more expensive.

During the calendar year 1919, the all-rail coal was 1,217,293 tons; tidewater, 290,065 tons. That is just the Boston & Maine. Witness has not that figure for all the New England roads.

Redirect examination:

There is a rail haul involved in all water-borne coal. Witness thinks the rail rate on water-borne coal is very nearly as high as the rail rate on all rail coal. Witness was justified in figuring a 40 per cent. increase on so much of the water-borne coal as related to the distance it was hauled by rail. He instructed each road to figure that on their rail rate charges only. He made it very clear
1377 that he wanted only the rail charges, but that he wanted the rail charges which were included in the cost of moving water-borne coal.

Witness' Exhibit No. 6 was wholly figures used in Ex Parte 74, except for the adjustments to which he has referred, that is, except for the omission of these second and third class and switching roads, and except for the adjustments on the New England roads which he explained.

The omission of the second, third and switching classes of roads involves now a difference in results of only .03 per cent.

When witness referred to the Boston & Albany and the Rutland, he used adjustments when they were taken on the side of the trunk lines, but did not use them when taken on the side of the New England lines. He thinks they did probably favor those lines a little, but he gave Mr. Hildum credit for using them, because he did not have any other figures for those roads.

Recross-examination:

When that summary was prepared under Mr. Hildum's direction, he was chairman of the committee of which witness was a member.

Mr. Hildum called a meeting of the committee, and they
1378 discussed the method of putting it up, and then the work of compiling it was all done by Mr. Hildum or his office. Mr. Hildum acquiesced in witness' suggestion that, as to the New England roads, there should be certain modifications of the figures that had theretofore been submitted. He seemed at that time to recognize

the justice of their contention. This report was made early, in the first half of August, 1920.

That statement did not take into view the Labor Board award. It was discussed at that meeting as to whether it should or not, and the conclusion was that there was no way of arbitrarily prorating the Labor Board award, and that the differences between territories which it was desired to show up could be determined just as well by taking the original submission as by going into it further.

E. J. PEARSON, heretofore called as a witness, was recalled and testified further:

Redirect examination:

Asked concerning Mr. Ewing's testimony about the closed bridge hours on the Central Railroad of New Jersey, the witness said:

"During the past several years, excepting a portion of Federal control and during the marine strike of the past season, the
1379 C. N. J. has had closed bridge hours against the New Haven; the present restrictive hours being from 4 A. M. to 9 A. M. and from 3:30 P. M. to P. M. The closed bridge hours seriously interfere with the regular handling of interchange traffic and considerably decrease capacity that would be practicable if there were no closed hours. Occasionally a New Haven tow that has been unexpectedly delayed arrives during the closed hours and is taken in by the C. N. J. only if it is convenient for them to do so. Contrary to the statement of Mr. Elder that all roads had closed hours and that the practice was necessary, the Lehigh Valley, the Pennsylvania Railroad at Greenville and the Long Island at Bay Ridge have no closed hours against the New Haven. The New Haven has no closed hours at its float bridges against the floats of any company."

Asked whether taking over the steamer Maryland service would cover everything that is involved in handling that floatage, or if there is much more involved than that, the witness said:

"Taking over the floating would be only a part of the proposition involved in the original steamer Maryland service and by the subsequent floating service by which the traffic is now being interchanged.

"In addition to the floating service performed by the New
1380 Haven, which apparently the C. N. J. would be willing to take over so far as its traffic is concerned, the New Haven has eight float bridges at Harlem River, which I believe is the largest group at any one point in the harbor. They are backed up by approximately 40 tracks, which are used in connection with and support the float bridges.

"There is also much yard service pulling cars from the floats and placing them on the floats. The float bridge tracks and yard service referred to above is all additional to what the New Haven would require as compared to a direct rail connection from the C. N. J. over which they would deliver their interchange without the necessity

on the part of the New Haven of providing and operating the extensive terminal facilities for receiving the traffic from the floats.

"The question, therefore, is as to whether or not for the floating allowance the C. N. J. would desire to take over the floating; also to go in the vicinity of the New Haven terminals and construct float bridges, supporting tracks and operate switching service as a substitute for that which the New Haven does in connection with its floating service in handling the interchange from the C. N. J.

"Apparently, the idea on the part of the C. N. J., as expressed by their witness, is that they would simply float, but not take
1381 further steps to provide and operate the floating terminals involved in the completion of the transaction as a whole.

"In this connection, I might add that the use of the Bay Ridge route as a substitute for floating service involves a floating terminal at Bay Ridge, other transfer service between Bay Ridge and Oak Point, and the rehandling again of the traffic interchanged through Bay Ridge at that point."

The Bay Ridge route is the one now used by the New Haven from the Hell Gate Bridge.

His attention having been called to Mr. Wright's testimony at page 1393 of the record, with reference to the expense of holding cars for the New England roads at Greenville, and asked whether that situation existed since the opening of the Hell Gate Bridge, the witness said:

"Practically not. With the opening of the Bay Ridge-Hell Gate Bridge route early in January, 1918, there has been practically no congestion or delay, except during the periods of labor troubles and occasional days of bad weather, which would be principally for fog. Otherwise, the traffic has moved freely.

"Mr. Wright's remarks undoubtedly have reference to times gone by, not to recent years. The Pennsylvania has endeavored, through its operating department, to cooperate closely with the New
1381*a* Haven Railroad, and as a result of the cooperation the service has moved, I believe, satisfactorily to both companies.

"During the year 1919, the New Haven had no general embargoes affecting traffic via the Pennsylvania, except for a short period during the shopmen's strike in August. In other words, there was no occasion for the holding of cars by the Pennsylvania.

"In Exhibit No. 141, Witness Williams, to which is attached a letter of Vice-President Atterbury, of the Pennsylvania, dated January 18th, there is shown on page 16 the record of the average number of cars held during the year 1920.

"Referring to page 16 of the Pennsylvania statement, Exhibit No. 141, it is shown, during the first five months of 1920, that the average cars per day held by the Pennsylvania was 19 as a minimum, and 453 as a maximum. During the last 7 months no cars were held. The same exhibit shows that the New Haven held for the Pennsylvania no cars in October, a minimum average of 35, and a maximum average of 995 for the other months in 1920. That is, the New Haven was holding, during all the months but one, a very much

larger number of cars for the Pennsylvania than the Pennsylvania held for the New Haven.

"The information for 1919, in respect to which I stated there were no embargoes except during the shopmen's strike and the
1382 records furnished by the Pennsylvania for 1920, show very clearly that the Pennsylvania has not been unduly holding cars at its Greenville terminal for the New Haven. On the contrary, the New Haven has been holding a larger number of cars in its terminals for the Pennsylvania. As an illustration of the present situation, our morning report of January 24th, shows 519 cars on the New York terminals of the New Haven, as against the Pennsylvania Railroad, under reclaim. That is under Rule 15; 483 on the 25th; 488 on the 26th; 383 on the 27th; and 396 on the 28th. I might add, in further explanation, that a ferry transfer across a harbor necessitates some holding of cars constantly, in the regular course of their movement. Mr. Wright may have had reference to such cars, but their presence is not only normal, but unavoidable; or he may have had reference to past years. He could not have had reference to recent years, because, as shown by the data, detentions in excess of the normal movement were more largely against the New Haven. The floating operations of the New Haven, in and out of Greenville, are restricted because of the capacity of float bridges, at the Greenville terminal, in comparison with volume of traffic. Greenville is the Pennsylvania end.

"The New Haven handles approximately 65 per cent. of
1383 the cars through Greenville, but receives roughly only about 55 per cent. of the float bridge hours. If the New Haven floats were handled as promptly, on an average, at Greenville as at Bay Ridge, their capacity would be increased to the extent of 100 or more cars per day. It is obvious that if the Pennsylvania should increase its float bridge service for the New Haven, that its interchange of cars to the New Haven and the relief of its terminal would be more rapid. Indicating the occasional desire of the Pennsylvania for relief in the movement of traffic through Greenville, not later than September 9th, 1920, a diversion of 100 cars per day from the New York gateway route to Maybrook was requested. This continued quite a number of days—10 or 12. It was not made at the instance of the New Haven. On September 27th, 100 cars were diverted by the Pennsylvania from the Greenville route via Maybrook. On September 28th, 100 cars routing through Greenville were diverted by the Pennsylvania through the Baltimore & Ohio, for delivery to the New Haven over the Baltimore & Ohio's St. George float bridges. While referring to these diversions, I will say, as a matter of fact, that it is good railroading."

Referred to exhibits presented by Mr. Williams, concerning the detention of cars on the rails of witness' connections, because of
1384 embargoes placed by the New Haven Railroad at various times, and asked whether that situation existed to any greater extent on the New Haven side of the junction point than on the other side of the junction point, and whether he had prepared a

schedule showing cars held on the New Haven lines for delivery to his connections, which had to be held by the New Haven line because embargoed by his connections, the witness said:

"During the year 1920, the earlier part, the railroads were affected by certain strikes. There was detention of cars on the part of every railroad that was involved. There was detention in New England in the same way that there was detention on other railroads in the traffic for New England. During the latter part of the year there has been serious detention in the movement of empty cars out of New England. These detentions aggregate, from March, 1920, to January, 1921, inclusive, a total of 380,636 car days. Quite largely they are similar in character. The number of car days, as applied to each of the New Haven connections, was:

"Pennsylvania, 135,166; Lehigh Valley, 9,261; C. N. J., 10,746; Erie, 52,022; Long Island, 1,730; L. & H., 110,107; O. & W., 2,083; New York Central, 5,724; L. & N. E., 5,443; Boston & Albany, which includes cars returning from handling traffic brought east over
1385 the New York Central, 48,354."

Asked what he had to say concerning Mr. Williams' testimony at page 2137 of the record with regard to the effect on operating costs of the New England lines of inadequacy of facilities, or methods still so susceptible of improvement that their gross operating revenues do not now yield proper operating income, the witness said:

"Contrary to the inference from Mr. Williams' remark, the New Haven System has overcome any former inadequacy of facilities or methods. The large expenditures and the exceedingly beneficial results in the way of handling a large increase in traffic units with, at the same time, a decrease in ton miles and in man hours, has been previously covered in the testimony. While not fully conversant with all of the other New England railroads, I have had occasion to make personal trips through some of the more important terminals of the Boston & Maine, and I find that their capacity in Boston is generally good, that they have made substantial improvements in their terminals at Lowell, that they have excellent terminals at Ayer, Fitchburg, South Deerfield, Mechanicville, and Rotterdam Junction. Material additions, I noted, had been recently made at Rotterdam Junction, South Deerfield, and Lowell."

Referred to Mr. Williams' testimony on page 2137 of the
1386 record, and asked what he has to say with reference to the characteristics of the New England roads in respect to operating, which distinguish them from other roads in the Eastern rate group, the witness said:

"As this has been fully covered in previous testimony of other witnesses, I shall not undertake to repeat the details; but, in this connection, attention is called to the preceding testimony outlining the different characteristics, the larger proportion of distributive and terminal service, the greater adversity, arising from the more rapid

aggregating of operating costs, particularly labor, in combination with the lower aggregating of ton mile units, upon which revenues accrue, and to other features I have covered in the testimony; also to the further fact that the roads west of New England territory are earning an average of several per cent. on their property investment accounts, whereas the New England carriers, operating under the national awards, as to rates and labor, are failing to do so. In consequence, it is claimed that consideration is due, on the basis of the provisions of paragraph 6, Section 418, of the Transportation Act of 1920."

Referred to Mr. Williams' testimony on page 2138 of the record, and his suggestion that the lack of sufficient revenue for the New England roads was due to their interchange business, or
1387 whether it was due to insufficient revenue from local business, and asked what he had to say as to that, the witness said:

"Previous testimony shows, for the New Haven System, that the September, 1920 operating ratio, for passenger, was 80.8; October, 85.1; and I may add, the November ratio was 87.4. Previous testimony shows that the freight ratio for September was 94.7; for October, 94.5; and I may add, for November, 103.65. It is apparent that passenger service carries its way much better than freight; in fact, that freight revenues are practically absorbed by operating expenses. It also appears in the testimony that the average ton mile revenue from freight was approximately as follows: Local, .06123 cents; intra-New England, .04371 cents; inter-Trunk Line, .01541 cents, the latter representing 80.7 per cent. of the ton miles. Also, in the testimony, the average cost per ton mile in September, was .018696 cents; October, .018824 cents, in other words, the large volume of inter-Trunk Line traffic is moving along on revenues averaging much below the average costs for operation. It is therefore contended that out of the total revenues from the handling of inter-Trunk Line traffic, that there shall be a sufficient reallocation from the roads handling the traffic apparently at a profit, as they are earning a return on their property investment accounts, to
1388 reasonably and properly compensate a carrier performing the more expensive portion of the joint service of which they are both partners incident to distribution and terminals."

Referred to Mr. Williams' testimony on page 2140 and 2141, and asked if he had anything to say as to whether his road had effected economies placing it quite on a par with those of any roads west of the Hudson River, the witness said:

"There has been nothing presented in Mr. Williams' testimony to indicate that the defendant roads have been more progressive than those in New England. In fact, none of them have submitted information to indicate any such progress in enlargement of facilities and improvement in operation as has been accomplished in southern New England. Conversely, it is the inference that if the New Eng-

land railroads are not fairly compensated out of the joint revenues for the service they perform, of course, it will discourage the future expenditures on those lines, which are just as important and just as necessary, as traffic develops, as are such expenditures on the defendant roads."

Referred to Mr. Williams' testimony on page 2142 of the record and asked whether there had been such a growth in the territory served by the New Haven Road as to make those figures of
1389 the 1910 census not quite accurately to reflect the conditions there, the witness said:

"The 1910 figures as well as the data submitted by Mr. Williams in relation to traffic moving in and out of New England by water, are misleading. We have seen many of the 1920 figures, and from them we realize that the growth of the territory during the past census decade has been large; consequently the 1910 figures are not indicative at this time. Further, as a result of the effect of war conditions on shipping, there has been a great change in the movement of traffic by water. This again distorts conclusions or comparisons during this past census decade. The handling of freight by water prior to the war, the handling of water-freight during the war, and the handling of water-freight at the present time have gone through quite material changes."

Water-borne traffic in and out of New England, as compared with the rail business at the present time, is relatively small. Water-borne has been decreasing and rail has been increasing for quite a number of years.

Referred to Mr. Williams' testimony on page 2144 of the record, with regard to the average hauls of the defendant roads, and their heavier train loads, and asked what he had to say about that, the witness said:

1390 "The statistics that have been introduced by Mr. Williams indicate longer average hauls and heavier trainloads on the defendant roads. The comparison is incomplete, as Mr. Williams does not show that under those circumstances revenue ton miles accrue in larger volume relatively, and payrolls not so rapidly, as compared to the conditions in New England, with shorter hauls which do not accrue revenue ton miles rapidly, but where there is a preponderance of local freight train road switching, junction service, terminal service, and station expense, which aggregate payrolls relatively with tremendous rapidity. Payrolls run up faster than revenue ton miles."

Referred to Mr. Williams' testimony on page 2145 of the record with reference to the relative costs of handling different classes of traffic, and asked what observations he has made on that subject, the witness said:

"It is not known that any road has been able to separate the cost of handling any particular class of traffic, as a whole. Contrary to the inference from his statement, the New Haven System has shown that the revenue of its local freight approximates 330 per cent. of the average operating cost; intra-New England, 240 per cent.; and the inter-Trunk Line, only 82 per cent. This reflects quite largely freight which is paying its way, and that which is not."

1391 Referred to Mr. Williams' testimony on page 2145 of the record concerning the division of expenses between passenger and freight, and asked what method he had followed in dividing his expenses between passenger and freight, the witness said:

"The method applied is that prescribed by the Interstate Commerce Commission. It applies to all railroads. The authority of the Interstate Commerce Commission is certainly good, in respect to this matter of divisions. All other methods proposed heretofore that we have seen, and which have been studied, do not vary greatly, and our accounting department has found in them nothing which indicates a better or a more equitable method. While it is true that the capacity of a line is measured in train miles, nevertheless capacity is not a question at issue at the present time, as the New Haven, for example, has demonstrated its ability, except during storms, strikes, or unusual waves of traffic, to fully meet all the requirements, a condition which, from the reports I see from time to time, is also true on all other New England railroads at the present time."

Referred to Mr. Williams' testimony on page 2146 of the record concerning station cost of handling freight, and asked whether he has anything to say with reference to that, with respect to the length of haul that is connected with the two classes of business,
1392 interchange business and local business respectively, the witness said:

"Admitting that the station cost is the same, as he stated, whether it moves one mile, 60 miles, or 100 miles, in connection therewith, in the first instance, there is only one ton mile on which revenues may accrue; in the second instance, 60, and in the third, 100. In other words, there is a very big difference as to how far a ton moves, when we take into account the basis on which revenues are accrued, which we receive for its transportation."

Referred to Mr. Williams' testimony on page 2148 of the Record concerning the result of consolidating all the New England lines into one system as bearing upon the average length of haul of revenue freight, and asked whether if the same principle were applied to the Trunk Line roads it would produce in his judgment a very startling difference, witness replied:

"It would very largely increase their average length of haul. Undoubtedly such a combination would substantiate further New England's disability in the way of this shorter average haul."

Referred to Mr. Williams' testimony on page 2153 of the record concerning the comparative total freight train switching and yard freight switching mileage of the New England lines, and to Mr. Williams' Exhibit 132, and asked what that exhibit really indicates, the witness said:

"This is a statement showing train switching and yard freight switching, on a mileage basis. Account must be taken of the work performed and the basis under which revenues accrue. A comparison, therefore, should be made not on engine mileage, but on ton miles. There is a vast difference in service required, placing individual cars at destination, in the serving of frequent junctions, in comparison with the switching out at an anthracite mine, where a large number of cars are placed or pulled as a unit, or in the
1393 shifting of heavy tonnage trains through large terminals."

Referred to Exhibit 132, the witness stated that the ratio of the New Haven's train switching and yard switching freight miles to its road freight locomotive miles is 6,600,000 over 7,783,000; roughly, 6/7. In the case of the Boston & Albany it is 2,300,000 over 4,800,000; roughly, ½. In the case of the Boston & Maine it is 5,500,000 over 10,100,000; roughly, ½.

Comparing the New Haven with any of the roads with which it interchanges freight, the total of the road and yard switching compared with the total road freight locomotive mileage is relatively much larger. The Boston & Maine is not far from the average of the roads having interchange with the New England lines. The New Haven's is considerably more than the New York Central, and somewhat more than the Pennsylvania. Roughly, the New York Central's is as 2 is to 3, and the Pennsylvania's is as 3 is to 4.

Referred to Exhibit No. 133, and asked what the comparison shows in the case of the New Haven, the witness said:

"It shows, with a main line mileage of 1,992 miles, that the yard and all side tracks aggregate 1,577 miles."

That comparison is not so far out of line with the roads in the group of roads which connect with the New England roads.
1394 Their total yard and side tracks are 16,000 as against 18,000 for their first main line.

Exhibit 133 makes the average percentage of yard and all sidings to total main tracks of the New England group 45.04 per cent. If the principal roads and the New England group were considered, that percentage would be 50 per cent or higher, to compare with the Eastern group, exclusive of the New England lines, of 52 per cent.

Both Exhibits Nos. 132 and 133 should be considered, on analysis, in the light of the thinner traffic and less yard and switching mileage of the lines like the Rutland and Central Vermont.

Referred to Mr. Williams' testimony at pages 2157 and 2158 of the record, and asked what he had to say about the comments upon the handling of l. c. l. freight on the New England lines, and the same kind of business on the trunk lines, the witness said:

"His statement has the appearance and endeavor to handle a package of l. c. l. freight as frequently as possible. The New Haven has spent several hundred thousand dollars for l. c. l. transfer at its Cedar Hill yard, which has been in service for 7 or 8 months. It consists of long covered platforms, intervening tracks, and drawbridges over the tracks for connecting the platforms, located
1395 at frequent intervals. The transfer is performed by the use of power tractors and trailers. Heavy freight is handled by a power truck with a crane, with arrangements for handling the still heavier freight by standard locomotive crane. Labor is reduced to a minimum. The cost of transfer expense has been reduced to approximately ⅓, as compared to former methods, and the handling through a larger number of l. c. l. stations. The large number of cars coming in daily enables the making of a maximum number of full loaded cars straight to many destinations. A straight car to destination reduces and obviates intermediate cost of handling, reduced loss and damage, and results in faster time to destination after it leaves the transfer. The New Haven is cooperating with its connections in respect to the loading of through cars, scheduling of freight runs on particular days, etc. The consolidation of the handling of l. c. l. freight in larger quantities at Cedar Hill has enabled the substantial closing of some former transfer station and has resulted in economy in handling of l. c. l. as well as improvements in service. It has not resulted in the reduction or closing of the many stations, however, which must be maintained, and which have been operated heretofore for the purpose of serving the public."

Referred to Mr. Williams' testimony at page 2160 of the
1396 record, and asked whether the New England roads have any such large traffic-producing points or businesses in their territory as the trunk lines have, particularly to such commodities as coal, cement, grain, automobiles, and fresh meats, the witness said:

"The New England roads are practically without such large traffic-producing points, such as those you mentioned, at which a large number of cars can be handled per switch engine hour, as compared with the demand on a switch engine in the delivering at destination, the destinations being small, and the picking up of 93 per cent of the carload traffic. Comparatively the points of traffic destination and origin in New England, while numerous, average small, as compared to those which you have referred to. In other words, there is no such opportunity for switch engines to pick up large quantities of traffic in bulk, such as at points similar to those to which you have referred."

Referred to Mr. Williams' testimony at page 2161 of the record in regard to the handling of coal at the mines and the picking up of cars at sidings, and asked what he has to say, the witness said:

"Mr. Williams' statement that practically none of the mines have sufficient track capacity in some places; that sometimes it is
1397 necessary to switch twice, and sometimes three or four times, is not indicative of a sufficiency of facilities on his line, and

should be considered in connection with his inference as to whether or not the New England roads have sufficient facilities."

Referred to Mr. Williams' testimony at page 2163 of the record, and Exhibit 135, and asked what he has to say about that, witness said:

"This exhibit shows the record of the New England roads, which is certainly creditable, with less tonnage, shorter average hauls, lighter trains, and the large percentage of cars to and from points of destination and origin. The difficulty of the New England roads is obviously greater. The figures indicate that the necessities of economy have compelled the New England roads to operate more carefully, and consequently that results in better statistics in respect to per cent of gross ton miles to rating ton miles by the New England roads."

Exhibit 135 shows a lower average of tons per train mile, the New England being 436 as compared with 653 for all the United States. As compared with 759 for the Ohio-Indiana district, and 1,054 for the Pocohontas region. In net ton miles per train hour, it shows smaller. The New England district is 4,640; Central district, 7,975; Ohio-Indiana district, 7,163; total of all regions, 6,817.

1398 With reference to gross ton miles per train mile it shows a smaller average for New England, 963, as compared with a general average of 1,349, and 1,599 for the Central district.

Locomotive miles per total locomotive day are a pretty important factor in reflecting what the locomotive performance is; but this statement is based on the year 1919, during a considerable portion of which the traffic coming into New England was abnormally low. It shows the average locomotive miles per day for New England was 48.7, as compared with 53.9 for the Central district, and 46.3 for the Ohio-Indiana district. The New England district average of 48.7, notwithstanding the distributive switching and terminal character of the service, is nearly as good as that of the Central district, where their train loading and total tonnage is greater; and it is better than the Ohio-Indiana district.

The fact that New England did not get as many locomotive miles per day as roads like those which have the long haul and which bring the average up to 56.9, reflect the operating difficulties which they have in New England.

The column which shows net ton miles per total locomotive day for New England is 18,559, against a total average for all regions of 32,374, which reflects a similar situation. It shows that

1399 notwithstanding New England was using its tractive power to better advantage than any of the other roads, its production of revenue ton miles was very much less. That is a very important illustration.

Referred to Mr. Williams' testimony at page 2166 of the record concerning the handling of traffic in and out of New England by water, and asked to state his information about that, the witness said:

"In the handling of New England traffic by water during the past few years, there has been considerable reduction in coastwise. Today the Merchants' & Miners' Steamship lines, for example, are operating considerably less steamer service than formerly. The Old Dominion Line, which used to bring up considerable traffic, moving up the Sound on Sound line steamers, has retired.

"They state—those who are interested in the lines—that they could not make expenses. All of the coal that is practicable to handle all-rail has been so handled, because the water rates went so high that all-rail service was less expensive to the consignee. The general trend of the last few years in such water traffic has been downward. There has been a normal tendency for quite a number of years, as the capacity of the western gateways and the main line arteries leading from them have been increased, to diminish
1400 the handling of the traffic rail water and rail, and to substitute all-rail. This, of course, is contrary to the transportation a number of years ago, which originally was by water to the outlet of the valleys and then up the valleys by rail. The tendency of traffic to leave the water and take the all-rail route is perhaps comparable with some reductions on the Erie Canal and on the Mississippi and Ohio rivers, as compared to years ago. Larger population concentrated in the vicinity of the shore, of course, increases the demand on the more important lines in southern New England, but attention is invited to the fact that as rates have been increased from time to time, not a large enough proportion of the increase has fallen to these New England lines and the result today is that they are going broke because they are not getting enough out of the joint revenues for the handling of their portion of the joint traffic."

Referred to Mr. Williams' testimony at page 2170 of the record, commenting upon the consumption of coal on the New England lines, and the cost, as compared with the cost on the trunk lines and in C. F. A. territory, and asked what he has to say about that, the witness said:

"A large portion of the coal for trunk lines and C. F. A. lines is furnished from mines on their rails. They have had the
1401 advantage of direct opportunity to place cars in preference for their own fuel. This has been a very great advantage. It has enabled them to purchase at the minimum prices. The New England roads, which are distantly located, are on the basis of commercial customers. During the past season they have had their troubles constantly in endeavoring to get their contracts protected by many of the defendant roads with cars. This could be gone into in detail at great length. As an illustration, at one period one of the trunk lines required the New Haven to furnish its own cars for use on that trunk line in order that its contracts might receive preferential supply between the mines and tidewater. In connection with this arrangement it is necessary for the New Haven to contract barge service to continue the movement of the coal up to its ports. During weather adversity, strikes, and an excess wave of

commercial traffic, the New England roads suffer seriously in the current and prompt delivery of their fuel. Under these circumstances which have existed heretofore, the obtaining of a supply of fuel for the New England roads has been most difficult and in frequent instances they were obliged to purchase spot coal at the higher market prices prevailing. The very great difference in the condition under which New England roads, their fuel being considered as commercial, have been obliged to contend with as com-
1102 pared to the much greater advantages of the roads directly serving the mines, has been indeed serious and in a general way will fully explain any differences in relative costs during the past season for fuel to the New England roads as against those in Trunk Line and C. F. A. territory. The preference to their own fuel that is being taken by some of the roads serving the mines was perhaps the occasion very largely for the service orders of the Interstate Commerce Commission issued during the latter part of the season, which established the same basis for railroad fuel for the lines serving the mines as for distant roads. They provided for preferential car supply for all the tonnage on ful mine output contracts for specified periods of time. After the issuance of this order of the Interstate Commerce Commission, which was very necessary under the circumstances at the time, it then became possible for the New England roads to contract for their coal on a basis similar to that of the roads serving the mines. The order, however, reduced the opportunity for the discrimination as a result of which some of the roads were obtaining coal under circumstances advantageous to themselves, but the distant roads were suffering badly. During the period early in the year to which I have referred, the instances were not infrequent in which the carriers west of the gate-
1103 ways actually confiscated coal that we had en route for the New England roads."

Referred to Mr. Williams' testimony on pages 2173 and 2174 of the record, quoting barge rates in regard to the cost of water transportation of coal into New England, and asked what he has to say about that, the witness said:

"The information relating to charter rates furnished by Messrs. Garfield and Proctor is indeed interesting, but it verifies the fact that the prospect for water rates that will make water transportation of company fuel economical are not yet in sight. The statement shows present rates to Boston of $2.25 from Hampton Roads and Philadelphia, and $2.50 from Baltimore. Before the war they ran from 60 to 75 cents per ton. It is one thing to move coal by water with a rail rate approaching $3 a ton from the mine, plus a water rate of, say, $2.25, or a total rate of about $5.25, as compared with all-rail delivery at western gateways at rates approximately $3. The New England roads avail of water transportation when the cost of coal at destination is less when so handled, but of all-rail movement, which refers to the Southern New England roads, when the operating expenses would be less from deliveries through their rail gateways, with the exception, however, that in numerous instances

during the past season the transportation disabilities of the
1404 roads west of their western gateways compelled the handling of some coal by water, although at higher costs to the New England road."

Referred to Mr. Williams' testimony at page 2178 of the record, witness stated that his line is basing its estimates after the end of the present coal year on the price of $3 per ton for coal at the mines, although if they can shade it a little they are going to do it.

Referred to Mr. Williams' testimony at the bottom of page 2178 of the record, the witness said he did not see that any of the features he states are local disabilities, beyond the fact that the New Haven suffered because of its smaller proportion of freight service, as a result of which the larger advances on freight than on passenger applied to a smaller proportion of its revenues. The New Haven road got $7,000,000 less than it would have if they had had the same proportion of freight to passenger that they had.

Referred to Mr. Williams' testimony on page 2179 of the record, and pages following, with reference to witness' report to his stockholders in the year 1919, and asked whether that situation has been changed so that it does not exist at the present time, the witness said:

"The report was written for the information of the stock
1405 holders and gave them information which was proper at the time. But that report is now a year old. In other words, Mr. Williams was reading history rather than present-day information. The New Haven today is well equipped. Mr. Williams very carefully omitted information in that report that reflects favorably on the accomplishments prior thereto, as relating to expenditures for increased capacity, and the splendid operating results that they actually have secured. The matters covered in that part of the report which Mr. Williams read as more necessary have been accomplished. The 40 engines were delivered and put in service last summer. Much of the Cedar Hill yard has been put in service, and large use has been made of the yard in Providence. Both have been showing excellent results. It must not be overlooked that the operating costs for the recent months therefore carry the benefits accomplished from the carrying out of the recommendations in the 1919 report. The New Haven has reasonable capacity and the progressive record shows a favorable trend in its operation.

"The construction charges to capital for 1920 on the New Haven are approximately $9,300,000; on the Central New England, $272,000; and during the year 1920 we were paying $2,200,000 on equipment trusts, which brings the total expenditure up to $11,772,000, which is almost that which was recommended in the report to the stockholders as desirable."

1406 Whatever benefit could be derived from expenditures and improvements is reflected in the recent months.

Referred to Mr. Williams' testimony at page 2188 of the record, and asked what he has to say concerning Mr. Williams' comment

about the conditions which he had referred to in his report as needing improvement which ought not to control the decision in the present case, the witness said:

"I stated in the testimony that the New Haven Railroad had done a number of things in order to come into this case with a clear record. One of them was to spend a large amount of money for the purpose of increasing its facilities and assuring that its operation was up to date and clear of criticism, so that it could ask for divisions on the merit of its operation capacity, etc."

Referred to Mr. Williams' testimony on page 2189 of the record, and a few pages following, and exhibits put in evidence bearing upon the embargoes by the New Haven against its connections, and asked to comment thereon, the witness offered a paper which was received in evidence and marked Complainants' Exhibit No. 191 in rebuttal, Witness Pearson.

Asked to explain the exhibit, witness said:

"Mr. Williams' reference to the average loading of cars leads to the inference that the loading is in the control of the New
1407 Haven. That is true, perhaps, with two cars out of five; but the average loading of cars depends very much more greatly on the action of those who load the freight and the railroads which receive in originating territory.

"Referring to the exhibit, the question of what is a normal performance of a railroad in average miles per car day depends in part on a comparison with its former records. They, therefore, have been submitted, back to the average year 1915, and they go to show that during the recent months former averages have been substantially reached. In parentheses there are some higher averages, which represent the actual situation, which I will explain later. The figures given are for February, March and April, 1920, and were due to very abnormal weather conditions.

"In May and June we had the strike.

"Turning to the second page of the exhibit, during February there were exceedingly bad storms in New England, and it is to be noted that in comparison with the preceding and following records, the New Haven's average was low. The New Haven suffered more severely than any other roads during these storm conditions, which were especially bad from the south and across its eastern territory. They were due to the formation of ice for days, and by the time they would get the tracks, the interlocking, etc., cleared, there would be another snowstorm, the snow would be banked up,
1408 and then there would be a warm day, the water would run down on the tracks and freeze, and the same thing had to be gone over again, time after time. But the B. & A., which was farther inland and did not suffer quite so much during February, had a big reduction. The Boston & Maine average was reduced. So was the average of the Maine Central and of the Bangor & Aroostook.

"At that period the low average of the New Haven was largely

due to storms, which the statement shows similarly affected other roads in New England. In March we were commencing to overcome the situation, but in April we became involved with the outlaw strike, and now, going to the lower portion of the tabulation, on page 2—"

Witness believes the outlaw strike did not affect the roads north of the New Haven in any manner. The Albany was not affected at all, but the New Haven was at both of its western gateways, very seriously; also temporarily at some other points.

Witness continued:

"Referring to the lower statement, the figures for the Central New Jersey show, roughly, a 50-per cent. reduction. The P. & L. E., which is part of the New York Central System went down to about one-third. The New York Central not quite so much. The
1409 Pennsylvania and the Erie both show the effects. The effects were less, to the extent that the railroads had more of their mileage which was not affected.

"During the year 1920 the New Haven has suffered a number of abnormal situations, which resulted in decreasing their average miles per car a day. I have just referred to the weather conditions during the winter and spring. I have referred to the strike conditions. In connection with those situations cars necessarily accumulated on the road. Of course, the more cars there are, the less the average miles per day. Then, there was the matter I referred to before. During May cars were standing ready to deliver to connections when they could take them, which is evidenced by reclaims against connections amounting to 133,971 car days, an average of 4,322 cars standing per day. In June, there was an average of 639 cars standing per day. These cars, of course, brought down the New Haven averages. During the year there has been a slowing up in the rate at which cars have been unloaded. Apparently the consignees were not as desirous of taking their freight quickly. This represents, in the aggregate, an average of about 500 more cars standing than formerly."

Referred to Mr. Williams' testimony on page 2189 of the record, and to his assertion that if the New Haven had obtained the
1410 car movement in 1920 that it did in 1919, it would have handled its traffic with 32,000 cars, and would have saved $5,000,000 a year, and asked what he had to say about that, the witness said:

"I have explained the impossibilities due to weather, strikes, delay in disposing of cars to our connections, etc. I call attention to the figures in parentheses, showing that for the last several months of 1920 the average miles per day have equalled or bettered former records. I can only conclude that if we had not had storms and these other troubles, perhaps Mr. Williams is correct; but that if he is correct, the same thing will apply to all other railroads similarly affected, and they could have each saved $5,000,000 or more per year. His computation is absolutely misleading. The inference

is unfair, and it is not based on a single justifying fact. The records for the last several months, as shown by the statement, are better than they have ever been before.

"Mr. Williams has introduced voluminous estimates with respect to embargoes. If I had been trying to get up exhibits which were complimentary to the New Haven Railroad, I could not have done better than Mr. Williams has done. It is true that several years ago there was more or less congestion and delay, but, as has been several times stated, that has been overcome, and today, for approxi-
1411 mately the past two and a half years, the New Haven Railroad has capacity to take care of all its traffic that was offered, providing it came along with fair regularity, and except for storms and strikes, which apply with similar necessity to every other railroad, as to its need of embargoing. During the strike this past year all railroads had to use the embargo. In referring to embargoes of the New Haven Railroad for the past two years or more, there is a very wrong inference. In 1916, Chairman Clark assisted the railroad executives at New York in cleaning up a situation of congestion. The New Haven Railroad, at least, learned its lesson at that time, and since then it has developed an embargo policy for the purpose of controlling the movement of traffic, so that the New Haven will not be congested, so that its connections will not be congested, and so that cars will not be unduly unloaded before they can be moved through. In carrying out that policy, we are working to the advantage of not only our road, but that of our connections and of the public in the end. As a result of that policy, during the year 1920, the figures being for the first 9 months, notwithstanding weather, strikes, etc., the New Haven had 10,657 cars placed at destination, on an average, per day. During the previous year, it had 8,703; during the year before that, 10,129. In other words, not-
1412 withstanding all of these troubles that we have been talking about, the New Haven Railroad, during the past year, had an average of more cars standing at destination—in other words, upon which it had performed its transportation service—than it had either of the two preceding years.

"In the handling of embargoes formerly—it has not been necessary recently—representatives of other railroads have been sent to our office at New Haven in order that the roads might work together and in order that they might give closser attention to the needs of the public. Not many months ago I conferred personally with the heads of each of our western connections in regard to the embargo policy, and there was not a single dissenting opinion as to the practice that we have followed. In other words, they agreed with us that is proper under the circumstances. I have stated that during 1919, when we were handling the maximum volume of traffic, that we were working without general embargoes, except during the shopmen's strike for a while during August. It is true there have been embargoes during the earlier half, and perhaps a little more of 1920. They have not been due to general capacity. They have been due to the same things that to a large extent affected other

railroads, and which, of course, cannot be avoided—weather,
1413 strikes and later an abnormal volume of traffic. After the rail capacity not only of the New Haven, but our connections, commenced to clear up as a result of better labor conditions, after the labor board's award, there was then a tendency on the part of all shippers to get all the freight through that they could, so that for the time being there was an undue wave. Now, we were obliged to put out embargoes to control that; but the embargo does not stop all the freight, the way we use it. It is used as an instrument of control. We put out an embargo, and then we make exceptions. As an illustration, I will refer to the embargo from the C. N. J. on carload and less than carload freight via all junction points when for points on or via the New Haven and C. N. E. railroads. Exceptions: Foodstuffs for human consumption; feed for livestock; perishables; livestock; field and garden seed; fertilizer, including agricultural lime, stable manure, nitrate of soda, and hardwood ashes; fuel oil in tank cars; gas oil in tank cars; fuel coal for use of these companies; fuel coal for bona fide use of hospitals, asylums, school and public utilities, including water, gas, electric light and street railway companies; print paper for domestic newspapers and magazines; freight consigned to or for use of the United States Government; sanitary lime for sewage precipitation purposes; freight from con-
1414 necting and rail lines for local delivery on these companies' rails at junction points of said lines.

"I am calling attention to the fact that these embargoes had very large exceptions. The exceptions did not involve practically all the normal traffic; but they involve all the traffic that we are sure we could handle at the time. Then, in addition to that, we issue permits for such further quantity of cars as will fill up the transportation capacity; and the result is that through the use of the embargo, with the exceptions and plus the permits, traffic is controlled during these times, and it comes along in the maximum quantity we can handle. So, through this policy, we handle the maximum traffic. Our figures have shown the results obtained. We keep our line free from congestion. We protect our connections from congestion, and we stop the freight at the point of origin, so that it will not get on the cars and lay around them, to the disadvantage of other roads or ourselves, and the movement becomes reasonably prompt."

Recess until 1.30 P. M.

E. J. PEARSON resumed.

Redirect examination:

Referred to Mr. Williams' testimony at page 2197 of the
1415 record with reference to the charge for per diem, the witness continued:

"One of the provisions of Rule 15 is that it shall be the duty of the connection intending to reclaim to notify the delinquent line daily prior to midnight, through the designated transportation office, or

in such manner as may be agreed upon locally, of the total number of cars so held for it, and on the following day, furnish the initials and numbers of the cars. That obligation, in order to get cars on the record, in order to reclaim, is such that the roads intending to reclaim overstate rather than understate, and in the settling of reclaims—that is, the actual payment of money—we pay for 20 to 30 per cent. less cars than those for which reclaim is made; so, automatically, the number of cars shown in these exhibits is more than the actual.

"Taking the Long Island exhibit, page 2, it shows, for the first 19 days of April, no cars held. Commencing the 20th, and continuing until the 18th of May, the number held was relatively small, not far from a day's movement. Commencing in April, we were affected by the strikes. Our total switching force in the New York terminals engaged in freight went out. During that ensuing 30 days, the terminals were operated largely by the official staff, and by a
1416 few new men. Nevertheless, the service given was indeed good. But, notwithstanding the fact that the situation resulting in the strike did not clear up until about the first of August, it is to be noted that the last third of May, and June and July, we practically had a clear record. It is as favorable a reflection on New Haven operating as there could be.

"Taking the Pennsylvania exhibit and referring to page 11, in the statement showing the average number of cars held by the Pennsylvania System for the New Haven routing via Greenville, attention is called to the relatively low averages for the first 5 months of 1920, less than a normal day for each month except April. Attention is further called to the remaining 7 months. There are no cars shown as detained. During 1918 the record is substantially clear, and that is true of 1919. Quite a number of the months are indicated by an 'X,' indicating that there are no reclaims. The reclaim rule was not in effect at that time. But I want to say that at that time our transportation records show the cars, whether under reclaim or not; so that during 1918 and 1919 the record is almost perfect; and, according to the Pennsylvania's own statement, that is true from June to December inclusive, and the record during the strike and storm period is not at all bad, less than a day's business.

1417 "The Lackawanna exhibit, page 8, shows here 1920 only. It shows an absolutely clear record as to cars held for the New York, New Haven & Hartford and C. N. E. Railroad during the year 1920, commencing with May 17th and continuing down to the close of December. The figures during part of April and part of March are small. They would not represent over half a day's business. During February and half of January they represent, roughly, from half a day's business to a day's business. That is the time of adverse weather. That record is just as complimentary to the New Haven Railroad as any that could be presented.

"The C. N. J. exhibit, page 40, for the year 1918, shows no figures during the last six months of that year, and none for the first 9 months of 1919, because of the explanation that there was no reclaim; but, again, we have a record of care delayed, whether the reclaim rule was working or not. You will find that the two or three

months preceding that interval, and the two or three months following it, the delay was trivial—only a small part of a day's business. From our own records, I state that the months that are not shown had substantially clear records.

"Going to page 44, it shows the year 1920. I again invite attention to the fact that since August 6th, about half the days show a clear record, and the other half of them a number of cars
1418 which represents only a small portion of an ordinary day's movement. During the preceding several months cars are shown delayed, and they are incident to the causes that have been stated, weather and strikes, but the delays are not bad. Generally they do not represent more than one or two days' combined normal movement, and under those difficult circumstances that record is exceedingly good.

"Before I leave this matter, I want to add that in the movement of cars, with regard to the statement that there is a question as to whether or not the New England roads are efficiently operated because they make a small average per day, from December 1st to January 25th, there was a total of 7,349 New Haven cars returned by the western connections empty. At the same time there were 11,377 cars of direct connections and 18,974 cars of indirect connections loaded on to us. Checking that movement, we find delivery after delivery in which New Haven cars are being sent home to us empty. They are being loaded in the direction of the volume of traffic, and at the same time we find that our connections and those that declined to promptly take cars from us under certain circumstances which have been covered heretofore are sending sometimes their own, and frequently cars that ought to have been headed west, into our
1419 territory. They load them into our territory. In other words, they are hauling two cars themselves, an empty and a load, instead of taking the New Haven empty and finding the load for it and using it. That practice results in overloading us with more cars than we should have. It results in car haul by us and car haul by them.

"It is a scramble to get rid of cars in order to save per diem when there is a surplusage. We know that when there is a shortage they take our empties going west, and have no trouble to find loads for them. They do not come back to us empty then, and we know, from the loading coming, that freight is still originating. I call attention to that because Mr. Williams, representing these lines, alleges that we do not move our cars or make the car miles per day that we should; but such action as this in sending the cars home simply increases our helplessness under some circumstances.

"I think that completes the remarks with regard to embargoes and car miles."

Referred to Mr. Williams' testimony at page 2197 of the record, about the New Haven voting in favor of the $1 per day per diem, and asked to explain that, the witness said:

"It is true that the New Haven did vote for the $1 rate. We did so for the reason that the information gathered indicated that
1420 that was a fair representation of the average cost of car ownership at that time. The per diem rate is reciprocal between the railroads, and for a number of years there has been a persistent purpose to endeavor, from time to time, to get figures which represent the average costs. They increase if they get more and more large capacity, high priced cars. That brings up the average. If the rates of labor for repairs are raised, that brings up the average. Mr. Williams showed that the cost per day was about $1.55. I am going to undertake to controvert that. We voted for that $1 a day charge because, in the reciprocal arrangement, in the interchange of cars all over the United States, it was a fair rate. That has nothing whatever to do with the cost of handling cars at the time these divisions were established. At that time the New England railroads, when they accepted those divisions, were getting the use of cars at a very, very low figure. Undoubtedly they had that in mind when they accepted those divisions. Since then the situation has changed, by the establishment of per diem, as a result of which they now have to pay the full cost of a car, and they would not object to paying the full cost for a car, considering car service, but they do object to carrying that additional cost at this time, when it was not an item of cost that was operating when the divisions were established.

1421 "Prof. Cunningham compared the basis when divisions were established, and showed what it would be if continued up to the present time; that the New England railroads would have saved about $17,000,000 a year. I have testified the New Haven would save something over $6,000,000. In connection with that, it should be taken into account that these sums paid by the New England railroads go into the treasury of the defendant roads. I think the basis of car hire per diem is all right. It represents the average cost of ownership. My point is that if the division was established under circumstances in which our connections furnished a car to take the traffic through to destination at a very low cost to us, that has been changed through the subsequent arrangement that we shall pay the cost of that car.

"Returning to Mr. Williams' exhibit showing the data for per diem purposes, I am familiar with this, because, as chairman of the transportation section of the American Railway Association, I participated in the preparation of this data. In the lower portion several bases for figuring per diem are stated. They were stated for the information of the executive committee, which formally decides on what per diem rate shall be submitted, by a ballot to all the railroads. There was contention on the part of a good many that the per diem
1422 rate did not justify or did not compensate those who recently have purchased new cars. In order to determine what the cost of owning a new car actually was, figures were made which showed that was nearly practically $1.54 a day. But the figures showed that the average for other cars, leaving out the recent purchases of new cars, was only 84.79 cents, so that to those old cars an estimate was made, taking into account not only the new cars that

had been purchased, but all those of which we had record, that were being ordered or contemplated, in order to get the average up just as high as was fair. The result was a figure slightly under $1. Then, in round figures, it was taken as $1. It is true that that dollar does not compensate the owner of a recently purchased car, which would be $1.54; but, when you take into account the fact that 90 per cent. of the cars are costing perhaps 84 or 90 cents, or somewhere around there, the average is liberal to the owner of cars, taking them all in all.

"The data was derived from averages based on 2,779,489 cars. I have not the actual number of new cars, but they are in the last two or three years, at high prices. The number, however, is relatively small, and they bring up the average only a few cents.

But it was the endeavor, in establishing a rate, to make an
1423 average which would be compensatory, so that, considering the fact that a railroad has so many old cars on which they would get the higher rate, they would be justified in going ahead and purchasing additional new cars, which we wanted them to do. We wanted to encourage that sort of thing, and not discourage it."

Referred to Mr. Williams' testimony on page 2203 of the record, comparing the average miles per day of car movement on the Boston & Maine and Boston & Albany, and asked whether those two roads were essentially different so that the car movement could not be fairly compared, the witness said:

"They are entirely different. The Boston & Albany is almost entirely a straight away run, with its large traffic centers distributed along its line. What is more, the Boston & Albany handles the traffic to New Haven territory from the New York Central, and about 40 per cent. of its cars it receives at its western gateways, it takes to the New Haven gateways, and within a few hours, or less than a day, they are turned over to the New Haven for the short haul, and for the standing time at destination.

"The Boston & Maine is not able to dispose of a large part of its traffic in the way that the Boston & Albany does to the New Haven.

Moreover, the Boston & Maine is more like the New Haven,
1424 in that it has many radiating lines and junctions, and a large number of points of destination. So that, as a railroad operating officer, it would be, in my opinion, impossible for the Boston & Maine to approach the performance of the Boston & Albany in miles per car per day.

"Carrying out Mr. Williams' comparison as to the $5,000,000 that the Boston & Maine might save, with equal justice we may say that if the D. & H. would secure the same mileage per day out of their cars as the New York Central, the Union Pacific, or some other railroad which has different circumstances and does very much better, the D. & H. could save $5,000,000."

Referred to Mr. Williams' testimony on page 2205 of the record, comparing a computation of the hours in which the cars moved on the New England roads with hours during which it was possible to move them, or in which they might have been moved, and asked what he had to say as to that, the witness said:

"To begin with, it is unfortunate that our bad order cars at the present time are about twice his assumed percentage, which was 6 per cent. They have been increasing because they are coming home from foreign roads, and have been during the year. A good many of them we have not seen for a long time, and they are sadly
1425 in need of repair. But, taking his comparison of the hours alleged on the New Haven, as I roughly analyze his figure, he has taken the minimum, as against the 2½ to 3 hours on the trunk lines, and, again, as I roughly analyze his figures, he has taken the maximum. His claim or comparison in that regard reflects the short hauls, the frequency of junctions, etc., and tends to substantiate the difficulties which the New England railroads have shown they are suffering under."

Referred to Mr. Williams' testimony on page 2206 of the record, and his suggestion that if there is greater terminal delay in loading and unloading in New England, that ought to be taken care of by a revision of demurrage rates, and asked what he had to say as to that, the witness said:

"Demurrage is covered by a tariff which is filed with the Interstate Commerce Commission. Its application is common throughout the United States. Recent tariffs have been negotiated by representatives of the carriers and the shippers, and mutually agreed to. It would be entirely contrary to the method in which the establishment of rates of that kind is determined to attempt to apply a higher rate, or change the rules in New England. Until a number of years ago New England used to have, I think it was, four days, while the rest of the country had two days' free time. But I believe it
1426 was Interstate Commerce Commissioner Lane who worked that out and brought the free time and the rules in New England to the same common basis and level as they are elsewhere."

Referred to Mr. Williams' testimony at page 2208 of the record, concerning the loading of cars in New England, as compared with other territories, in connection with the hauling capacity of the locomotives, the witness said:

"The New Haven power, as to size, is adequate and well adapted to requirements. I think that is true of the Maine Central, because up to the time we obtained our new engines last summer we had several of their engines leased, and they were large capacity engines. I understood from the Maine Central people at that time that they were not pressed for them, and the conclusion necessarily is that they had adequate and ample power at that time, or they would have wanted them. There is a certain economy in power which is not too heavy for the character of traffic that is to be moved. It would be uneconomical to take an engine unduly large and put it on a line of light traffic. Of course, the New England roads, unfortunately for them, do not have a large volume of tonnage, and a long through haul, such as their western connections have, which justifies their western connections in utilizing a greater proportion of large

capacity power. It is possible that that smaller sized power
1427 on the New England roads is partly explained because of what appears to be the more economical use of its power as to rating ton miles used, a matter which was brought out in Mr. Williams' exhibit. He shows a locomotive having a capacity of 4,000 adjusted tons, on a 3 per cent. grade line, etc. What he says is a true statement, but it is very misleading, because there are not very many long continuous 3 per cent. grade lines in the United States, considering all the railroads as a whole. In New England I do not think there are any of any considerable length. The adjustment to which he refers is for the purpose of equalizing the tractive effort that a locomotive must exert. If the same tonnage is confined in a smaller number of cars, it takes a little less tractive effort to pull the tonnage than if it is distributed through a larger number of cars. That adjustment factor is higher on a very low grade line, and gets less and less as the grade line becomes heavier and heavier. Therefore, Mr. Williams undertakes to draw a conclusion under the most favorable circumstances with respect to the theory he wishes to present. What he says is true, the differences getting less and less as the grades get higher, and consequently it is quite misleading."

Recross-examination:

Before reclaims are paid each car is checked up, and wit-
1428 ness' experience for a long time shows that a good many cars are charged to them under reclaim, for which their line is not responsible for the delay, and that in checking those bills as to accuracy, it is found that they pay somewhere from 70 to 80 per cent., roughly, of the cars which are reclaimed under these original or preliminary reclaim notices which are sent to them, and which are used as the basis of these exhibits that have been submitted.

Witness' own experience in presenting reclaims to his western connections is that they collect a little more than 70 or 80 per cent.

The New Haven Cedar Hill yard is located in the eastern end of New Haven, and is now fully in operation. It has been in use for all the traffic that it was desirable to put through there, for about a year.

The work there has not been entirely completed for a year, but there is enough of it completed so that they can make the use of the yard that they desire. The yard cost about $7,000,000, and has already very materially improved the operations of the New Haven. The New Haven has had the full benefit that it expects to have from that yard during the latter part of the year—quite largerly for the full year.

The Providence yard is located in the northerly portion
1429 of Providence. It is not quite completed. It is now, and has been for a number of months, of material assistance in operating the road. It is partly in use, as to the part completed; and the part completed is sufficient to easily take care of their requirements.

A facility of that character usually is designed and laid out so that, from time to time, as the years go by, and traffic increases, it

is possible to add a track or two tracks. So, like most railroad facilities, its completion at the present time is sufficient to take care of the present business. But, as to a complete plan, that is laid out for a definite expansion in the first place, on the present requirements, it would seem to be wasting money. The New Haven has been receiving the full benefit of that facility since last August, or somewhere in there.

The New Haven received 40 locomotives last summer, the last of them in July or August. They have already improved its operating conditions. Witness hopes that the condition growing out of the return of cars to his line in bad order will improve. They get all those cars back after a while, and they will be repaired, and they will then only have the normal proportion of bad order cars. But, as a result of the scrambling up of the cars during Federal operation, and, in fact, until after the situation cleared up which re-
1430 sulted from these outlaw strikes, their cars have been away from home very badly, and now there is a big movement coming back. During this ensuing year witness does not know but what their maintenance of equipment charges on account of freight embargoes will be particularly high. Witness does not think that will be true of all railroads, because he saw some records the other day which indicated that at the present time the bad order cars were about 6 per cent. on other roads, and on the New Haven it is twice that.

No attention was paid to the ownership of cars during Federal control. They were distributed and loaded everywhere, regardless of ownership, and witness presumes every road found its cars scattered over the country. Witness knows of no reason why the New Haven road should be more fortunate than others in that regard; but, when they went under Federal control they had less than 3 per cent. of their equipment in bad order, and in that respect their condition was better than that of other railroads of the United States under Federal control.

The cars which witness testified were held for delivery to the Pennsylvania Railroad in October and November of this year, and perhaps in December, were not embargoed by the New Haven or by the Pennsylvania Railroad. There may have been some minor em-
bargoes. A dispute as to whether they were properly offered
1431 under car service rules was more or less the cause. That was not only between the Pennsylvania and the New Haven, but between the Pennsylvania Railroad and all their western connections, and as to the delay to those cars, the B. & M. suffered. That was something the witness could not understand. Those cars were entitled to go home and go home promptly. That congestion was usually at their western terminals, that is, at Maybrook and Harlem River. Those cars were mostly box cars. Finally the New Haven connections took them and moved them west. That was true as to practically all of them.

Asked whether some of these cars were taken away from these gateways and sent through other gateways, the witness said:

"No, there was very little of that."

Asked whether there was some of it, the witness said:

"Very little, because if we could not dispose of enough cars through one gateway, instead of diverting, we would unload them. There is a rule that box cars are to be equalized at particular junction points."

Asked whether the trouble was that they were not equalized, the witness said:

"No. The trouble was that, as the volume of traffic in New England reduced, which reduced the number of cars which were coming in and consequently made a condition possible in which the
1432 cars in New England as a whole commenced to decline, there were more cars at that time to go out than were coming in. Now, it is true that at that moment the cars to go out were in excess of the equalization of those coming in. That situation was discussed, and it was agreed that in cases of that kind the Car Service Division at Washington would have the authority and would take such steps as were necessary to overcome that situation. And the trouble recently was that the railroads that should have taken those cars did not go along with their reasonable obligations or with the endeavors which were made on the part of the Car Service Association."

Witness does not know anything about the cars that accumulated at Rotterdam Junction and Mechanicsville, or Albany. Witness does not know whether his company made reclaims on cars that accumulated at Maybrook. It is their practice to reclaim on all cars as to which they feel that the connecting lines are responsible. Witness expects reclaims to be paid on those cars.

Asked whether he knew what the western lines represented as to why they were not taken, the witness said:

"Yes. There were a great many explanations. Some of them claimed that they were filled up on reclamations, and sometimes they said they did not belong to them, and sometimes they
1433 said they would take them if their connections beyond the gateway would take them. There were many explanations given, but the reclaims occurred."

It is the New Haven's practice to place embargoes freely in order to restrict traffic coming on to the road to the number of cars that they can properly handle. Witness thinks that is the correct practice. It is a proper course, so far as the New Haven is concerned. Under an embargo the railroad is handling all the cars it can handle, if properly handled. Witness would say that in order to properly handle them it has taken a long period of time, and they have developed a pretty experienced force in the transportation department, with pretty experienced assistance from their traffic department, and with assistance from connecting lines, in order to handle the situation efficiently and get the best out of it and avoid discrimination against any particular shipper.

Asked whether it is not a little inconsistent to suggest that embargoes should be put out for that purpose, and at the same time complain that there is not sufficient freight business to properly load the cars or load the trains, the witness said:

"I do not know of any such combination. I showed you that these congestions that have been inferentially alleged have not occurred on the New Haven."

1434 Mr. Williams' exhibit shows that the New England lines generally were getting a large percentage of their engine tonnage ratings on their trains, and it is a fact that their train loads are light. That is not due to the light power they have. They are light for the reasons which have been stated in the testimony of Prof. Cunningham and Mr. Slater. When it comes to a train out of the western gateway itself, it is just as heavy as anybody's train, on an average. The further the traffic goes and the more it has to distribute, the more train mileage there is and the lighter the train service becomes.

Referred to his Exhibit No. 191, the witness said he was not setting up 14 miles a day as a normal figure for the month of December; he is setting up what would have been the figure if these abnormal conditions to which he has testified had not existed. Under normal conditions they expected to get 14 miles or better. Witness does not say that the movement per day in 1920 is a maximum movement for the New Haven property.

They expect to make improvements, but they have had so many that the field for additional improvements which will save them more money is far less than it has been in the last few years. They really expect to do slightly better than the record shown in 1920, provided they have the traffic.

1435 Generally after a carload reaches its general destination on the New Haven and is subsequently shifted or shunted to side or spur tracks, the New Haven does not receive compensation for the service to those side tracks. The situation in that regard on the New Haven is the same as it is throughout the United States. For instance, a side track to a private industry in Providence will be entitled to delivery of a car which comes from Chicago to Providence on the Chicago-to-Providence rate, when the New Haven delivers that car on a bulk track or on a private track, if it was within the limits contemplated by that tariff.

Asked whether, as to the general expense, there is more freight service given on the New Haven than generally in Trunk Line and Central Freight Association territory, and asked about that switching to private tracks, the witness said:

"I am doubtful if there is; and the reason for my doubt is this: that we have so much and so large bulk yard delivery—team track delivery—that I am rather surprised at the number of industries in New England which do not have track connections. Through the Central States and the West, where I have been before, it is not often that you find an industry which is not on a track, but there

are lots of them not on tracks in New England, because they
1436 started years ago, before the practice of side tracks was recognized to be the economical and desirable thing that it is today. I cannot answer you definitely, but that is my inference."

Witness does not know that there is a popular impression to the contrary. Of course, popular impressions are usually wrong. It is barely possible, referring back to Mr. Williams' exhibit, that the fact that there is not a greater percentage of tracks in New England—witness means, of side tracks compared to main line mileage—is because of the circumstances witness has stated; that there is such a large number of industries which do not have track connections, but which team or truck freight to and from the bulk yards. There are operations in connection with the Grand Central Terminal which afford the New Haven what may be termed a non-operating revenue. There are a number of rentals, and it is witness' understanding that the returns from them are credited to the joint account of the Grand Central Terminal.

Witness does not know whether this non-operating revenue was included in the other non-operating revenues in Mr. Brigham's Exhibit.

Witness excused.

Counsel for the complainants stated on the record that the date of Mr. Hildum's report was August 11, 1920, and the date of the decision in Ex Parte 74 was July 31st; the rate of water freight used in the coal price in the forecast for the year ending
1437 October 31, 1921, on the Boston & Maine estimate, was $1.85 per gross ton, or $1.65 per net ton, including insurance and war tax. The rail freight on all-rail coal was $3.23 per net ton. The rail freight on tidewater coal was $2.76 per net ton, a difference of 47 cents.

Adjourned to Monday, February 7, 1921, at 10 o'clock A. M.

1438 Washington, D. C.,

February 7, 1921—10 a. m.

A statement was received in evidence and marked Defendants' Exhibit 191-A.

A paper was received in evidence and marked Defendants' Exhibit 192.

Counsel for defendants stated on behalf of Mr. Lawrence, a witness called by the defendants, that the testimony of that witness at page 1468 to the effect that the Boston & Maine is allowed a terminal on eastbound traffic from C. F. A. points to Boston via Maybrook, and the New York, New Haven & Hartford to Northampton, is erroneous; and filed a statement showing the stations both for the New York, New Haven & Hartford and the Boston & Maine via the D. L. & W. and Maybrook, on which the Boston & Maine does get this arbitrary allowance.

The statement referred to was received in evidence and marked Defendants' Exhibit No. 193.

The same counsel also corrected a statement of the same witness, found on page 1468 of the record, in regard to the distance from Maybrook to Boston via Northampton. The correct distance is approximately 260 miles.

WILLIAM J. CUNNINGHAM, heretofore called as a witness
1139 by the complainants, testified further:

Direct examination:

Witness has made a study of Mr. Williams' testimony, and of the exhibits produced by him.

Referred to the testimony of Mr. Williams on page 2141 of the record, with regard to conditions that he considered peculiar to New England, the witness said:

"I think Mr. Williams' summary of conditions which he considered peculiar to New England includes factors which have a very remote, if any, bearing on the case in question, and minimizes certain other factors of very much greater importance. His first factor is the high proportion of passenger service. Throughout his testimony he leaves the inference that the passenger service is a burden to the New England roads. As a matter of fact, the passenger traffic of nearly all of the New England roads is more remunerative than the freight traffic of the New England roads. I shall refer to that feature a little later in greater detail.

"The second point is that there is a very high proportion of l. c. l. freight traffic in New England, and he leaves the inference that that l. c. l. traffic is entirely local. As a matter of fact, a substantial part of the l. c. l. traffic is interchanged with the trunk lines and C. F. A. lines.

1140 "His third point is that a substantial part of the traffic in New England is interchanged with the coastwise boat lines. I have read Mr. Pearson's testimony of last Monday, and find that he has shown that that traffic is a very small part, and not a controlling factor in the situation.

"The significance of Mr. Williams' fifth point, that the New England territory is contiguous on only the west to the other portions of the Eastern rate group is not clear to me.

"His sixth point, relating to the density of manufacturing establishments, is supported by incomplete statistics which, in themselves, are of little value. He either ignores or unfairly minimizes the effect of the controlling factors which have been emphasized by all the witnesses for the New England roads, and which, in my direct testimony, were summarized as: First, the diversity and diffusion of traffic; second, the high terminal and station density; and third, the low traffic density. Mr. Williams, by an ingenious statistical process, applied to but one side of the equation, attempts to discredit the factor of a relatively short haul per ton in New England."

Referred to Mr. Williams' testimony on page 2143 of the record, to the effect that if there are special difficulties in New England, they must relate to local rather than to interchange traffic,
1441 and asked what he had to say as to that, the witness said:

"In my opinion this statement ignores the factors of the shorter road haul, and the higher density of junction points, branch lines, and terminals. In my direct testimony I called attention to the fact that for a given volume of ton miles the New England roads are obliged to give three terminal handlings per ton to two terminal handlings per ton in the rest of the Eastern district. Mr. Williams' testimony on that point ignores the more expensive character of the service because of the greater diffusion of traffic, which requires a greater number of short train runs, with relatively high constructive mileage to train crews and relatively low ton mile productivity of locomotives and cars."

Referred to Mr. Williams' testimony on page 2144 of the record to the effect that the business into and out of New England must require equal track facilities and equal expenditures on each side of the junction point, and asked what he had to say as to that, the witness said:

"He stated that these required an equal effort per mile of road haul, and I disagree with him on that point. The greater density of terminals, the greater proportion of branch line mileage, the greater diffusion of traffic, the lower ton mile density of New England, require a greater effort of man power, motive power,
1442 and of yard service per mile of road haul. That is the point that ought to be emphasized, per mile of road haul. As has been frequently pointed out and emphasized, the New England roads are handicapped by a much shorter haul over which to distribute the expenses of terminals, junctions, and yards."

Referred to Mr. Williams' testimony on page 2145 of the record, and to the fact that the cost statistics of the New England roads were not separated between the cost of local and the cost of interchange traffic, and asked whether he had found it impossible to make that separation, the witness said:

"Yes; and the reasons were explained in my direct testimony. The element of joint cost is so controlling that it is impracticable to make any separation of costs as between interline and the local traffic, which would stand the test of analysis. Mr. Williams has offered no suggestion as to how it might be done. I do not know how it could be done satisfactorily."

Asked whether defendants had offered anything for the trunk lines, to show how such a separation can be made, the witness said:

"My scrutiny of the testimony has shown no cost statistics introduced on the trunk line side."

Referred to Mr. Williams' testimony on page 2145 of the record, stating that the New England costs that the witness used
1443 were for certain selected items and for only those, and asked what he had to say about that, the witness said:

"The cost statistics applied not only to selected items, but also to the ton mile cost, the inclusive ton mile cost. My Exhibit No. 29 shows the cost per ton mile in New England and the corresponding costs in Trunk Line and C. F. A. territory, and the net revenues in the two territories on a ton mile basis."

Referred to Mr. Williams' testimony on page 2145 of the record, that the capacity of the railroad is measured by its train miles, the witness said:

"I do not agree to that. The capacity of the road is not the number of trains or train miles. The capacity is the number of ton miles and passenger miles. Train miles are no more the product of a railroad than cartons and shipping cases are the product of a shoe factory, or machine hours are the product of any plant. Train miles, machine hours, and the like, are a necessary part of the production of the real product, which is ton miles. Of course, it goes without saying that any factors which limit or reduce the capacity of a road to run trains would have an effect on the road's production of ton miles, and that is the very point which the New England roads are emphasizing, that their natural handicaps are such that they are unable to get, per train, the same ton miles that
1444 the trunk lines and C. F. A. lines are able to get per train. In my direct testimony I gave the relative net train load in the two territories and showed that for a given number of ton miles it was necessary in New England to run 174 train miles to move the same tonnage that 100 train miles would move in Trunk Line and C. F. A. territories. Approximately the same limitation in New England appears in the product when it is measured in ton miles per train hour or ton miles per locomotive hour or day."

Witness does not know of any commodity that moves in train loads from the interchange point to Boston. Occasionally the major part of a train might be made up of grain, or it might be made up of coal, but it would be a very rare circumstance in which a train would be solid grain, coal, livestock, or any commodity that moves in large volume. It would be purely accidental if that happened to be the case.

Asked whether there is a livestock train which moves up over the Boston & Albany, the witness said that he is not sure that it contains only livestock, but livestock does move on a certain train. The probability is that with that livestock there might be some other tonnage, but it is 13 years, witness thinks, since he was connected with the Boston & Albany, and he does not remember it now.

Such movement would not be possible at any other point
1445 than Boston, in New England.

There are no train load movements of forest products,

such as paper, that move from the mill points outbound in trainloads. It might happen that in a certain train the proportion of pulp products would be controlling, but there is no possibility of operating on a train load basis.

Witness agrees with Mr. Pearson that the handicap of this excess number of train miles that he has just referred to makes payrolls accure faster than revenue ton miles.

Referred to Mr. Williams' testimony on page 2146 of the record, with reference to the proportion of passenger train mileage on the New England roads, and asked what he had to say, the witness replied:

"The inference, as I get it from reading that testimony, particularly where Mr. Williams says: 'I should assume that the passenger train service as to those lines would be called upon to carry its proportion of the burden,' is that the passenger service is not called upon to assume its proportion of the burden and that the expenses ought to be divided on a train mile basis. That basis takes us back to the first crude efforts of 1887, when there was an attempt made by the Interstate Commerce Commission to divide expenses. That basis was subsequently given up, and in the 1915 and 1921 classification of expenses, that is, for the division of expenses be-
1446 tween the passenger service and the freight service, the train mile basis is used only in certain selected items and other bases are applied which more equitably distribute the load. The cost statistics which we introduced for the ton mile cost were based upon those which Mr. Wettling prepared for all the roads in the Railway Mail Pay case. His method was approved by the Interstate Commerce Commission and presumably was agreeable to Mr. Williams since the Delaware & Hudson was one of the roads interested in the Railway Mail Pay case. Certainly the authorities are against the train mile basis as a general divisor of expenses, except in a certain few items, such as signal expenses and others which really are related to the train mile rather than to the other units of production. What I meant was that the methods which Mr Wettling followed were those which were prescribed by the Interstate Commerce Commission in its classification for the separation of expenses, with the exception of one point in connection with maintenance of way, and on that the Commission had allowed some latitude."

Referred to Mr. Williams' testimony on pages 2146 and 2147 of the record, that it costs just as much to handle a ton of freight at a station, whether it moves one mile, 60 miles, or 100 miles, but there is no relation between ton mile costs and station costs
1447 in the way that complainants have used them, and asked what he has to say, the witness replied:

"The statement which you have quoted is precisely what the New England roads desire to emphasize, that the station cost is regardless of the distance which the ton of freight moves; but the interpretation which Mr. Williams puts upon it is different from the in-

terpretation which I should put upon it, because I see a real relation between station costs and the distance which the ton moved through the station moves. In other words, if the road haul is short, there is a very much smaller road revenue over which to distribute the station costs and the burden on New England is particularly heavy because of that short haul.

"It is one of the peculiar operating handicaps of New England that this road haul is short, and with a station cost fixed, of course, the burden per ton mile is very much greater for the short haul than it is for the long haul. Therefore, I see justification for showing a relation between station costs and ton miles."

Referred to Mr. Williams' testimony on page 2147 of the record, suggesting that there should be some analysis of the average length of haul so as to show separately the average length of haul for the local traffic inside New England and the average haul out-
1448 side, and asked what he had to say, the witness replied:

"In Mr. Slater's direct testimony, which I heard, I recall that such evidence was introduced. He had statistics which gave the average length of the haul on interchange traffic on the New Haven Road and the corresponding average haul for the lines with which the freight was interchanged. I did not have his testimony in preparing this memorandum, or I do not remember the exact figures, but I am certain that the excess of the Trunk Line-C. F. A. haul on interchanged traffic, over the similar haul in New England, was greater on the interchange traffic than it was on the traffic as a whole. I do not know that I have made that entirely clear, but my exhibits show roughly a 100-mile haul in New England for all freight, and 153, I think, for all freight outside of New England in the Eastern district. That is approximately a 53 per cent. longer haul on all traffic. Mr. Slater's statistics, I am quite sure, show a greater excess than 53 per cent. on the average haul of the interchanged traffic."

Referred to Mr. Williams' testimony on page 2147 of the record, again, concerning witness' Exhibit No. 17, which relates to the average haul, and arrives at different figures from those stated in the exhibit, and asked what he has to say about that, the witness said:

"My exhibit showed an average haul in New England of
1449 100.64 miles, while Mr. Williams shows another average, which is slightly greater.

"I think that Mr. Williams must have included the Boston & Albany and possibly the Canadian Pacific lines in Maine. Unfortunately his figure is not susceptible to check, because he merely gives the average, without the supporting data. My exhibit gives all the details, by roads, and it is taken from the preliminary abstract of the Interstate Commerce Commission for 1918. I believe that my computations are correct, but I cannot check Mr. Williams' figures. In Trunk Line territory he shows a lower average haul than I do in my exhibit, and presumably that is due to including some class two roads. In all of my exhibits, the class

two roads were excluded and I followed the list of roads which was used by the United States Railroad Administration in all of its monthly statistics, assuming that that was the complete list of class one roads."

Referred to Mr. Williams' testimony on page 2148 of the record, concerning two exhibits, one introduced by Mr. Brigham, and one introduced by the witness, and computing a figure for the average haul of the New England roads, considered as if they were one consolidated railroad of 163 miles, and asked what he has to say about that, the witness said:

1450 "As I understand Mr. Williams' process, he took my exhibit for the calendar year 1918, showing the total tons moved in New England, and deducted what he calls the duplicated tonnage shown on Mr. Brigham's exhibit, which was for another period. My recollection is that Mr. Bringham's statement covered the constructive year ended October 31st, 1919, so that the two exhibits are not for the same period and the results may not be correct. But, even if they are correct, and the figure of 163 miles for New England as a group is correct, Mr. Williams has given no corresponding figure for the trunk lines, and the 163 miles for New England is of no significance unless it is related to a figure for the trunk lines and C. F. A. lines similarly computed."

Referred to Mr. Williams' testimony on page 2152 of the record, and his Exhibit 131, relating to road freight locomotive miles and train switching and yard switching locomotive miles, and asked what he had to say about that, the witness replied:

"In my opinion the comparison is not proper. A comparison of two ratios is not proper unless one factor in both of the ratios is fixed. In this case both factors in both equations are variables, and they are affected by different sets of conditions. The switching work is more on a car basis than on a train basis. The work con-
1451 nected with switching ten trains of 60 cars each, is essentially the same as that of swiching 20 trains of 30 cars each, 600 cars in each case; but in the case where the larger trains are run, the divisor in that equation, the divisor which is used to get the ratio, is only one-half that of the divisor used in the second case. Therefore the ratio there would have but very little significance to the actual burden of yard work. Now, the operating conditions in New England are such that a larger number of trains is necessary than in Trunk Line territory for a given volume of traffic. That has the effect of increasing the divisor and of reducing the ratio, and Mr. Williams draws conclusions from a lower ratio, without taking into account why that lower ratio, namely, through an inflation of the divisor by the necessity of running a greater number of trains."

Referred to Mr. Williams' testimony on page 2155 of the record, showing the relative number of manufacturing establishments in the two territories, the witness said that he thinks they are not of any particular significance, without supporting data, concerning the

size of these establishments and the volume and nature of their products and that a showing in regard to capitalization might have relation to size.

Asked whether there were any New England manufacturing establishments or establishments of any kind which produce the volume of tonnage or ton miles that the coal mines or the
1452 grain fields or the rubber factories or the steel mills or the packing plants produce in Trunk Line and C. F. A. territories, the witness said:

"I do not recall any. We have a few large textile mills, but nothing that would produce traffic like the coal mines or the steel mills of the Pittsburgh district."

Asked whether there is any expense in New England which is comparable to the gathering expense from mines producing coal, the witness said:

"The gathering expense of moving this traffic through the many terminals, yards, and junction points surcharges that traffic with heavy costs, and the net results are shown by the condition of the New England roads. On the other hand, while the difficulties of collecting, preparing and dispatching trainloads of coal are impressive in the record, yet, the net result is not entirely unsatisfactory to the coal lines. In other words, the coal traffic is a very attractive traffic, notwithstanding all of these burdens in the collection and dispatch of coal trains. Coal is regarded as one of the most attractive revenue producing commodities moving in large volume, making it easy of train handling. The risk is small, and the loss is very slight. The coal lines usually show, while they show a very small revenue per ton mile, a correspondingly low cost
1453 per ton mile, so that the net revenue is attractive from the coal.

"The average car of coal will run between 45 and 50 tons, while the average car of merchandise will run from 10 to 15 tons, speaking in general averages. The figure is more accurate for coal than it may be for merchandise."

Referred to Mr. Williams' testimony on page 2163 of the record, and to Exhibit 135, and comments upon the per cent of gross ton miles to the rating ton miles, and asked whether he had studied the exhibit and had anything to say about it, the witness said:

"Yes; I have studied that exhibit, and regard it as a valuable exhibit from the viewpoint of the New England railroads. Mr. Williams does not comment upon the features which appeal to me, and his comment upon the per cent. of rating hauled does not have the same significance to me as it has had, apparently, to him. I speak with some confidence on that particular unit, because it was one element in the plan which I designed for the United States Railroad Administration when we inaugurated the plan for standardized operating statistics. The object was to get, in one single figure, a ratio which would reflect the loading efficiency, but we had

a very great deal of trouble in getting the instructions thoroughly understood and properly followed. It is interesting to note that the Interstate Commerce Commission in revising the require-
1454 ments for operating statistics effective the first of this year, has dropped out the requirement for rating ton miles. Presumably Dr. Lorenz and the committee of railroad executives cooperating with him in revising the rules for operating statistics have recognized the difficulties of getting one figure to show the average results for the entire road. I felt, when that unit was prescribed, that it was of some value, although I recognized its limitations. After an experience with the United States Railroad Administration in checking up the reports which came in under those instructions, I came to the conclusion that it was of very little value. If it is of any value, if the New England roads followed strictly the instructions and if the trunk lines followed strictly the instructions, it would indicate that the New England roads are operating with a high degree of efficiency in overcoming these natural handicaps; but, in my opinion, they are not entitled to a bouquet on that account. An analysis of the United States railroad statistics shows equal differences between lines whereon you would expect to see about the same degree of trainloading efficiency. For example, in the January, 1920 statement, which I happen to have, which is the last one that I have, the per cent. of loading efficiency on the Pennsylvania Railroad was 56, while on the B. & O. the ratio was 76.4. I do
1455 not think that we would want to condemn the Pennsylvania and commend the B. & O. on that showing, without certain qualifications. The Central Railroad of New Jersey shows a ratio of 69.6, while the Reading shows a percentage of 60.2. The D. & H. shows a ratio of 75.5, while the Erie reports 56.1. Those differences are due to a variety of causes, and I do not attach any particular significance to the fact that the average for New England is slightly more than the average for the rest of the lines in the Eastern district. What the exhibit shows, and what is of greater interest are comparable figures, which are not subject to so much qualification or uncertainty. That is the trainload, and other factors. The gross trainload, for example, on Mr. Williams' exhibit, in the first block, for January, 1919, for New England, was 963 tons; Central district, 1,599; Ohio-Indiana district, 1,411; Allegheny region, 1,469. The net trainload in New England was 436; Central district, 759; Ohio-Indiana district, 700; Allegheny region, 755. The net ton miles per train are: New England, 4,640; Central district, 7,975; Ohio-Indiana district, 7,163; Allegheny region, 6,838. The per cent. of net ton miles to gross ton miles, that is, the ratio of the live load to the dead load is: New England, 45.3; Central district, 47.5; Ohio-Indiana district, 49.6; Allegheny region, 51.4.

1456 "That is a unit which was introduced in the New England exhibits, but is one of peculiar significance, the per cent. of the paying load to the gross load of the train. It is considerably lower in New England than in the rest of the Eastern district. These figures, I think, reflect operating handicaps and have a peculiar bearing on the case, whereas the one factor of the loading ratio is not sufficiently accurate to have any compelling significance."

Asked whether New England produces anything where they can get loads of anything like 50 tons per car, which is at all comparable with coal, the witness said:

"Nothing that is comparable with coal. The granite quarries would produce a heavy carloading. Pulp moves in fairly heavy carloads. There are other commodities which make fairly good carloads, but move in small volume; but nothing that is as helpful in the carload and in the net trainload as coal."

Referred to Mr. Williams' testimony at page 2135 of the record concerning the Bangor & Aroostook having the longest average haul per train, and average miles per locomotive day of 48.7, and asked what significance that has in his judgment, the witness said:

"No significance whatever, in my opinion. I find it difficult to understand just how Mr. Williams reasons that there is a
1457 relation. One is a characteristic of the traffic. The other is the reflex of operating conditions, such as the length of the division, and train runs, the number of branch lines, the nature of the trains, and the surplus or shortage of power. If there were any relation between the two factors, it would be interesting to compare the figures for some of the trunk lines. The New York Central average haul is about 220 miles. Its average miles per locomotive day, in January, 1920, was 59.5. In that month the Bangor & Aroostook average miles per locomotive day was 57.1, slightly less than the New York Central, while its average haul was about 125 miles, very much less than the New York Central. The B. & O. has an average haul of about 180 miles, but in January, 1920, its locomotives averaged but 52 miles per day, or 7 miles less per day than the Bangor & Aroostook."

Referred to Mr. Williams' testimony on page 2186 of the record, commenting on the amount of constructive mileage for train crews, which has to be considered outside of New England, and asked whether there is anything in that which compares with the amount of constructive mileage that has to be allowed in New England, the witness said:

"Of course, that is largely a matter of opinion. My opinion is that the burden of constructive mileage for train crews is
1458 very much greater in New England than it is in Trunk Line and C. F. A. territory, and I speak with some knowledge, from operating experience in both sections, having in mind the impressive figures which were introduced in my Exhibit 19, which showed an analysis of the Boston & Maine freight train service for one day. The problem is much more difficult in New England than outside on account of the larger number of shorter runs. The Boston & Maine, for example, showed such a large number of train runs which move but 25 miles.

"A number of those short runs are turn-around runs. I think about one-half of them are turn-around runs, but the average miles per crew on that large number of runs of 25 miles or less was less

than 50. I am speaking now from memory, but Chairman Clark asked a question about the large number of 25-mile or less runs. I inquired, and had figures computed to show how that was affected by turn-around runs, and found that the average miles per crew in that service was a little less than 50, indicating that perhaps two of the 25-mile runs were a day's work for the average crew. It is a problem that cannot be entirely overcome. It is a problem that is being studied continually. Progress has been made from time to time, but it is one of the problems that is continually before the managements of the three large New England roads, that is,
1459 the three roads with large traffic. I speak from experience, knowing how the problem is continually being studied on the Boston & Albany, on the Boston & Maine, and on the New Haven."

Referred to Mr. Williams' testimony at page 2198 of the record, urging that there is no relation between per diem and divisions, and assuming that per diem was a practice that came into operation substantially after the divisions were established, whether he would feel that it is a factor which has no relation to the question of how rates should be divided, provided it is peculiar to New England and inherent in that situation, the witness said:

"I do not follow Mr. Williams' reasoning in stating that an upward revision of the divisions would, as he states in his testimony, deprive the car owner of his rental. When the existing divisions were established, the car mileage basis was in force, and car mileage was an operating expense. It was one of the elements on the expense side of the equation, and undoubtedly it was recognized, for whatever value it had in the negotiations between the New England roads and their connections in arriving at a rate. I say that without knowledge, but it is presumed that that is a fact. Now, the substitution of per diem in 1902 has brought a burden which was not contem-
1460 plated when those divisions were made; as stated in my direct testimony, the per diem rate, theoretically, adds about $17,000,000 a year to the New England roads parties to this complaint. That is, if the mileage rate had been increased in the same percentage that the per diem rate had been increased since 1902, the burden of car hire for New England roads would have been $17,000,000 less. The car owner is not deprived of a return on his investment through an upward revision of the divisions. The car owner will get his rental just the same. What the New England roads ask is that the connecting lines shall take into account the fact that the New England lines have to pay the car owner that very much larger sum than was contemplated when the divisions were established. I may say that the principle of recognizing per diem in a division is recognized in the universal practice of granting switching lines a reclaim. That, to my mind, recognizes the principle. The switching roads may reclaim from the road giving the line haul a certain number of days per diem, and the reason for that is the burden on the delivering line of that per diem, without the road haul. That, to my mind, is recognition of that principle that the per diem has a relation to the division of the through rate.

"That is the same principle we have in New England, that we cannot make the same mileage. In the switching road, it
1461 comes in greater degree. The New England roads are not asking for a reclaim, although such a method has been suggested by somebody in authority. But that has not been advanced by the New England roads. Instead of that, they ask that the trunk lines give consideration to the fact that the per diem is an increased burden which ought to have a bearing on a revision of the divisions."

Referred to Mr. Williams' testimony on page 2203 of the record, making a comparison of the car miles per car day on the Boston & Albany and on the Boston & Maine, and an inference, perhaps, that the lower performance on the Boston & Maine is due to inefficient operation, and asked what he has to state about that comparison, the witness said:

"I think that the inference is unfair. From a knowledge of the operating characteristics of the two roads, I agree with Mr. Pearson's testimony that the two roads have such different characteristics that in the very nature of things, the average miles per car day on the Boston & Albany would be very much greater than on the Boston & Maine. It is just as proper to compare the car miles per day on the Delaware & Hudson with the car miles per day on the Nickel Plate, the difference between the two roads last named being no greater than that between the Boston & Albany and the Boston & Maine.

The Boston & Albany has 200 miles of main line, and about
1462 396 miles of total road. More than one-half of their entire mileage is main line, heavy traffic, well equipped, with third and fourth tracks. The Boston & Maine, you might say, has 500 or 600 miles of main lines of the first grade, out of 2,500 miles for the system. Similar differences appear in the statistics of recent months. I have before me a summary of operating statistics of class one railroads for the month of November, 1920, received a few days ago from the Bureau of Railway Economics, and from that I find these comparisons: First, there is the comparison which Mr. Williams makes, the Boston & Maine miles per car day of 19.0; Boston & Albany, 32.2. Then, I make these analogous comparisons:

"Delaware & Hudson, 31.6; Nickel Plate, 53.3. Central Railroad of New Jersey, 14.7; Lackawanna, 34.6. I am trying to group roads now, that have some relation to each other. Lehigh & New England, 8.8; Lehigh & Hudson River, 53.6. New York, Susquehanna & Western, 4.6; New York, Ontario & Western, 19.0. Pittsburgh & Lake Erie, 10.6; Big Four, 31.6. These averages reflect the characteristics of their traffic, and they do not mean that because the Central Railroad of New Jersey is roughly 15 miles and the Lackawanna is roughly 35, that the Central Railroad of New Jersey is less efficiently operated than the Lackawanna. The degree of
1463 efficiency would have to be determined in some other way.

"The performance of the Boston & Albany is in some measure due to the fact that they have a long main line which is very well equipped, and deliver a great volume of the business that they

handle over to the New Haven Railroad at different junction points, where the New Haven and Boston & Maine have to do the terminal work. That is an important fact.

"They will take that business at Albany from the New York Central, and perhaps take it to Springfield, Worcester, or Framingham, and get a long straight haul, and turn it over to the New Haven and the Boston & Maine, which have to do all the peddling out. Besides that the Boston & Maine and the New Haven have this net-work of criss-cross lines, interlaced lines. The Boston & Albany has a straight line, with right-angle projections for short distances, so that in no case, my recollection tells me, is there any complication through diamonds and five-pointed stars on the railroad map, which is peculiar to the Boston & Maine in the New Haven."

Referred to Mr. Williams' testimony at page 2207 of the record, calling attention to the low average tractive power per locomotive, in New England, and asked what he had to say about that, the witness said:

"That is not a very important point, but there is a quali-
1464 fying factor that ought to have been emphasized somewhat more than Mr. Williams emphasized it. In getting at that average, he took all locomotives, and, of course, included passenger locomotives. The passenger locomotive, particularly that which is used in the suburban passenger traffic, is one of light power; with such a large proportion of the total power in passenger service, the average would necessarily be pulled down by the inclusion of the passenger power."

Cross-examination:

Asked how long he has been a railroad operating officer, the witness said:

"I have been in railroad service since 1892. I have been in executive positions since 1907; so, I have had about 29 years' railroad experience. It is a matter of record. It began with the Canadian Pacific in 1892, in the passenger traffic department. In 1896 I was transportation clerk in the office of the superintendent of the Boston & Albany Railroad, for 3 years, and for a couple of years more, later than that, I was a transportation clerk in the office of the general manager of the New York, New Haven & Hartford Railroad. Between 1900 and 1907 I was assistant chief clerk to the general superintendent of the Lackawanna Railroad. From 1907 to 1914 I was assistant to the vice-president of the Boston & Albany. For
1465 one year I was president's assistant, New York, New Haven & Hartford; and then, when Mr. Hustis went to the Boston & Maine, I went with him as president's assistant, between 1914 and 1916. Then I was appointed professor of transportation at Harvard University, and continued to do some consulting work for the Boston & Maine as consulting assistant to the president. I was also, for a few months, employed in a special capacity with the comptroller of the Union Pacific Railroad."

Witness has been continuously connected with the New England roads since 1907. On a small road, such as the Boston & Abany Railroad, the line of distinction between operating & other officers is not very clear. Witness was really a staff operating officer on the Boston & Albany Railroad and, to some extent, when he was first with the Boston & Maine. On the Boston & Albany Railroad he was in the office of the superintendent for two years. As a teacher and student, he has been in a general way familiar with general conditions of the New England Railroad from 1907.

The financial condition of the New Haven Railroad in 1907 was regarded as very strong. It had a very long dividend record. Witness does not remember whether it was six, seven or eight per cent. It ceased paying dividends in 1913 or 1914. They had these operating difficulties at the time they were paying dividends. Also they had higher rates. Witness thinks they were higher than those at present.

1466 Witness wants to qualify his answer about the operating conditions. The operating conditions have been very much accentuated and added to recently. That is part of the thesis in this case, that the advances in the art of transportation have been largely confined to road movement, and these advances have not been possible to the same extent in station and terminal operation. Consequently the New England roads have not been able to utilize to the same degree as roads in other parts of the country the advances in road efficiency, while they have had this greater burden of terminal cost; and the per diem has changed very much since the time in which the New Haven road had its favorable dividend record. There are other factors.

Railroad transportation inclusive of cost has cheapened more outside of New England than it has in New England. For the reasons stated, the improvement in methods and facilities per unit of traffic has been greater outside of New England than inside. There are areas in the central territory where the terminal cost is as great as similar costs in New England, but witness was taking the question as applying to the group as a whole.

The increase in motive power is one of the factors that witness mentioned as being an advance in the art of transportation. The larger locomotive has a greater field of usefulness outside of New England than it has in New England, because of the inherent

1467 characteristics to which witness has referred. The witness is not now connected with any of the railroads in New England. He is about equally familiar with the Boston & Maine and the Boston & Albany. The Boston & Maine has recently made purchases of motive power, of the United States Railroad Administration standard, of the heaviest type. Witness thinks that it is of the largest tractive power that is now in use. It is the Santa Fe type, the heavy type of standard locomotive—not Mallet Compound.

Taking the motive power of the Boston & Maine, as a whole, the average tractive power is low because of the demands of the branch lines for the light locomotives. The traffic of the branch lines does not justify heavy locomotives. Witness meant the tractive power of

the freight locomotives. It would be uneconomical to run heavy power on these numerous branch lines, with a fraction of a load. They bought 25 or more of these large locomotives. It was a wise purchase at the time it was made. The largest locomotives in use prior to that purchase were slightly lighter.

Witness does not consider the motive power of the Boston & Maine fully adapted to its necessities now. He does not consider the motive power of any railroad fully adapted to its requirements. There is always room for improvement on every road.

1468 Asked whether he thought they might have gone sooner to the larger type, with profit to themselves, the witness said:

"There is a limiting point. It involved the strengthening and reconstruction of bridges. When the bridge work was done, they could order the heavier power."

They made those improvements in the bridges during the last two years, and it is still going on. Witness does not know how far they have gone with this program. He thinks there is still considerable to be accomplished, but he is not sure.

Asked whether it will enable still greater use of this superior power the witness said:

"Well, there is a question there to be determined by experience, as to whether that particular type of locomotive is not as large as is justified by the possibility of trains, with the volume of traffic."

Witness indicated in his direct testimony that he does not at present consider the ratio of utilization of tractive power of much value. He began to reach that conclusion in the early part of 1919, when he was trying to make head and tail of the reports which were coming in from the various roads while he was assistant director of operation of the United States Railroad Administration. He

1469 proposed the taking of that figure for the purposes of the Railroad Administration. It was collected all the time that he was in charge of statistics.

He testified before the Interstate Commerce Commission, or before the Examiner, on December 15, 1920, and referred to the "Per cent. gross ton miles to rating ton miles," as an index of train loading efficiency. At that time he considered it the index of train loading efficiency, and a poor one. He did not say that it was an absolute index, or that it was a poor one. It was one index that was used. He makes it very clear now that it is necessary to qualify it. Witness does not admit that these statements are contradictory.

Witness' testimony that the passenger service in New England is more remunerative than the freight service, is based on the operating ratio. He did not use Mr. Wettling's percentages at all in getting at this operating ratio for the relative remunerativeness of the passenger and freight service. His conclusion is not based at all on that method of distribution. It is based on the distribution which was made by the accounting departments of the various New Eng-

land roads, in accordance with the standing instructions of the Interstate Commerce Commission as to how to do that thing.

1470 Asked whether he had anything to do in devising that classification, the witness said:

"That is rather an embarrasing question. It may be that my influence was felt on one or two points, when the classification, as it was revised a year ago, was finally adopted. In other words, one or two suggestions which I had made, were adopted." Witness does not know whether this distribution is satisfactory to the New England lines, or to the New Haven or to the Boston & Maine. It is prescribed by the Interstate Commerce Commission. Witness was informally consulted by Dr. Lorenz of the Interstate Commerce Commission at the time it was made, and gave him the benefit of his views at that time. He was then an officer of the United States Railroad Administration. He thinks that classification is generally satisfactory to his line at present. He thinks it is as good a classification as they can have, in trying to take care of a very complicated problem of distribution of joint costs. To some extent it is arbitrary. There must be arbitrary bases used.

He thinks somewhere betwen 40 and 50 per cent. of the expenses can be properly assigned to passenger or freight. There is not a larger percentage capable of direct assignment in New England than elsewhere.

1471 Ayer is between 30 and 35 miles, perhaps 40 miles, from Boston, and they have an ordinary kind of a yard there for interchange between the two divisions, the branches that come into Ayer. Witness does not know that there is anything peculiar about it. It is just an average yard. It is of secondary importance on the Boston & Maine line. If you should group the yards of the Boston & Maine, say, into four groups, it would come in the second group. Mechaniesville, East Deerfield and Boston would be in the first group. Witness does not know whether the yard is sufficient for the purpose for which it is there. He does not know whether there has been any recent recommendation for its enlargement. He has not been actively connected with the operation of the road since 1916, except just in a consulting way on special problems. So that he would not know about the details of progress in improvement.

Witness does not think it is common to move train loads from Mechaniesville to Ayer. That is too long a run. It is 150 or 160 miles. Mechaniesville to East Deerfield is approximately 100 miles. The distance from Rotterdam Junction is about the same. It is a similar distance from East Deerfield to the east end of the road, at Boston. That is a fair average run. Under the 8-hour day that is the maximum length.

1472 Asked whether they get much overtime pay on those runs, the witness said he had not seen the figures since the 8-hour day and the punitive overtime was granted in train service. He does not know.

There is a heavy trainload movement from Rotterdam to Deerfield. There is no difficulty in getting a trainload movement for that run

at any time out of Mechanicsville, but some of the cars are dropped before you get to East Deerfield. There is more or less diffusion of traffic between Mechanicsville and East Deerfield. There is a greater diffusion between East Deerfield and the east end of the line.

There are some stations between North Adams and the Hudson River. Witness does not recall those of traffic importance; but there is North Adams, which is an important point, and a connection with the Boston & Albany Railroad. There is a connection with another line east of the Hoosac Tunnel. There are different manufacturing plants all the way down the river from the east portal of the tunnel to Deerfield and Greenfield.

There are very many more difficulties in getting a full train out east from East Deerfield than in getting a full train into East Deerfield from the West, because the diffusion of traffic, the number of junction points and the number of branch line connections are greater east of the Connecticut River than west of the Connecticut River. There is a heavy movement of commodities origi-
1473 nating in the West into Boston over the Boston & Maine. Relative to anything else that goes on in New England, it is a large traffic. The Fitchburg division of the Boston & Maine has the heaviest traffic of any part of the Boston & Maine Railroad.

Ayer is the junction for the line that runs to Worcester, the line that runs to Nashua and Lowell, and another branch, that witness has forgotten the name of, and the main line to Boston. Ayer is the center of those lines coming in.

Witness does not know whether trains, when they come into Ayer have been classified as to whether they are going through to Boston or going out on branch lines from that point.

Asked whether he thinks it would be a good thing to classify them in that way at Mechanicsville or Deerfield, the witness said:

"It would not be right for me to express an opinion on that, unless I had made a particular study of it. I have expressed opinions, on subjects about which I am competent to express opinions, but you are now asking me to express an opinion on a subject as to which I am not competent to speak."

Referred to a statement that:

"It is difficult to make any exact separation of revenues, expenses, and other statistical data between that which applies to the
1474 interline traffic and that which applies to the local traffic. It is necessary in comparisons to take the freight traffic as a whole in both territories, and in doing that I frankly recognize that the high proportion of local freight traffic in New England may have an adverse effect upon operating costs."

And asked whether he considers that a fair statement, the witness answered in the affirmative.

Witness assumes that the proportion of local traffic is higher in New England than it is in the rest of the Eastern district.

On an arbitrary basis it is possible to get the cost of operation on a branch line. There are certain items that are joint with the main line, but that problem is very much easier than attempting to separate the interline and the local traffic.

The Interstate Commerce Commission at one time, after having a separation of expenses between passenger and freight for some years, dropped it out of its reports because the results were misleading, and they were based on train miles almost exclusively. Witness has concluded since then that there is a better method. The adoption of this method was not immediate because of the determined opposition of a number of railroad officials to attempting to make
1475 such a division.

Referring to the separation of expenses, witness has used the term throughout all these cost exhibits that they were "indicative, but not necessarily accurate in all respects," because accuracy is impossible.

Asked whether there is a larger proportion of expenses directly assignable as between passenger and freight in New England than in other sections of the country, the witness said:

"I am not sure about that; but my impression is that the proportion of expenses which are joint would be larger in New England than elsewhere, because of the high terminal density and many factors in operating expenses which are inherent in a complicated system of lines such as New England has."

Witness thinks that the Massachusetts lines are required by law to carry passengers on workmen's trains and 12-ride tickets at a subnormal rate. He means a rate lower than one which would take into account a proper proportion of all joint expenses. It might take care of the direct costs; but, not knowing what it is, witness does not know whether it does pay the direct costs or not. There are a very small number of these workmen's trains. They are market trains. There is such a train on one or two lines of the Boston & Maine. Witness does not know whether they have them on
1476 the New Haven. He does not know whether any effort has been made to be relieved from the burden of that statute. Such an effort might have been made without his knowledge.

Witness agreed with Mr. Williams that the cost of handling less than carload traffic at a station would be the same per ton, whether it was to move one mile or 60 miles, because the station costs would be independent of the distance moved on the line. He had in mind any and all expenses. The station expenses are independent of distance.

Asked "What did you indicate as to the proportion of that traffic that is local to New England," the witness replied:

"I did not indicate anything, because I do not know. I said that a substantial part of it was l. c. l. traffic, originated in New England and destined to other points in the Eastern district."

Asked "You mean, east of the Hudson River," the witness replied:

"East of the Hudson River."

Asked whether he meant "But not west of the Trunk Line termini? In either Trunk Line or C. F. A. territory; is that what you mean?" the witness replied:

"Some of that l. c. l. traffic, I suppose, moves all over the country. I cannot testify to just what the proportion is."

Some of the l. c. l. traffic, witness supposes, moves all over the country. He cannot testify as to just what proportion. The l. c. l. traffic is handled at the transfer stations in Massachusetts like the Cedar Hill station. The Boston & Maine has several transfer stations: They have one at Mechanicsville. Witness does not know whether there is one at Rotterdam Junction. He does not know whether the transfer at Mechanicsville is operated by the Boston & Maine or one of the connecting lines. The cost of loading at that transfer point from one train to another would be the same—possibly not
1477 exactly the same—as the cost at any other transfer point.

New England does not receive as much l. c. l. traffic as it originates. The l. c. l. traffic which originates in Boston, New Haven, Worcester, Springfield, Providence and Hartford is distributed all over the United States. The connections peddle out all the l. c. l. traffic they receive from the New England lines. Witness believes the proportion peddled out by connections is much less than that peddled out by the New England roads.

The Boston & Maine has a long dividend record, and during the time they were paying dividends, they were peddling with their connections all the time. Conditions have changed.

The cost of per diem is an element in the through rate. New England has to pay a larger part of that factor of per diem, and the New England roads ask that that factor be taken into consideration in this request for increased divisions. One reason the New England roads have to pay a larger part of the per diem cost is because their haul is shorter. They have about one and one-half times the terminal handlings per ton that they have in trunk line territory. That means a greater detention to cars.

The New England roads could improve their operation if they were in a financial position to spend a great deal more money;
1478 but New England hasn't any monopoly on that. There is hardly a line in the Eastern district outside of New England that could not do the very same thing. Witness does not know what he would do to improve conditions in New England. He does not think that the fact that the New England lines have to keep the car very much longer than do the others is due to the lack of classification at the western gateways. It is due to the four characteristics witness has mentioned, diffusion and diversity of traffic, network of junction points and branch lines, low density of traffic, and shorter hauls.

Witness does not think it cost more to operate the Fitchburg and

the Boston & Maine together than it cost to operate them separately. He does not know. He knows that a few years ago it was indicated that the Fitchburg, if it had been operated alone, would not have been able to have done as well as it did as part of the Boston & Maine system.

In some cases consolidations have brought about net economies. In other cases consolidations have increased costs. It depends entirely upon the nature of the roads which are consolidated. If a road that had very expensive standards, like the Pennsylvania Railroad, should take over a small road that was living from hand to mouth, and then should bring that small road up to Pennsylvania
1479 standards as to maintenance and equipment, of course there would be no net economy. The cost of operating the small road would be greater.

There ought to be no perceptible difference in the cost of operating a given number of junction points under a common company, and a given number of junction points under half a dozen managements.

If it is true that Massachusetts has a more dense population than that of any State in the Union, that would certainly not be a drawback in the operation of that railroad. But the concentration of the population at the sea-board has no bearing on the question at issue. The concentration of population at Boston, and at other New England cities is a good thing for the railroads.

It would make very little difference to the New England railroads whether they paid per diem or owned more cars. Under present conditions, for the New Haven Railroad, at least, the ownership of cars is not effective. Witness states this from his own knowledge, because of his experience in that line for one year in 1913 and 1914. He has not specifically followed that question subsequently, but the logic of the thing is simple. If the western roads will send back New Haven cars empty, and at the same time load freight for New England in cars which belong to the Western roads, of course, there is an economic waste through double billing. The
1480 empty Western car has to go back, and the New Haven has to keep its own car on its road, because naturally it is going to load the Western car back to save per diem.

The per diem balance on the New Haven road is fluctuating. Sometimes it is favorable, and sometimes it is against them. It is not a give-and-take proposition. The Western roads can at times force their cars on the New Haven. It has operated in times of cars surplus, and it will operate when there are periods of surplus in future times. The last time witness knew it to be so was somewhere around 1913. He has not known of its appearing since. Both the Boston & Albany and the Boston & Maine own less cars than they use daily. So that that condition would not obtain. At the present time it would cost them a great deal more to own the cars than they would have to pay in per diem. The per diem rate is based on the average value of all cars in the service.

Trains are incidents in the production of transportation. The capacity of a railroad is not measured by the number of trains that will pass over it. The capacity is the number of tons that will pass

over it. If you can increase the train load you can increase the number of tons, but not over any piece of road. The witness is speaking in generalities.

1481 A train is an indeterminate factor. It may be a locomotive with markers, or it may be a locomotive with a hundred cars. Capacity is affected by the length of the train. By lengthening your trains you could increase the capacity of the track. It would mean that more trains would have to be run for a given number of tons.

The capacity of a road may be increased by increasing the number of tons per train, and you would eventually reach the maximum capacity in that direction. The tonnage capacity of a train is limited by the load per car, the type of the car, the capacity of the locomotive—that is, its tractive force—the grades, the trackage facilities the sidings and the yard facilities. It may be limited by the number of train crews available. Sometimes the number of trains is limited by the number of firemen that are available, in either hot weather or cold weather. The capacity of the train is affected by the size of the car.

A locomotive can handle a certain amount of gross tonnage. The resistance of the train varies somewhat, not directly, but in proportion to the average weight per car. A locomotive can haul a very much greater live load of coal than it can handle over the same grade with merchandise, because the resistance per ton of a merchandise car lightly loaded may be 7 pounds per ton, while in the case

1482 of the locomotive hauling coal it may be only 3 pounds per ton. Witness means the friction resistance rolling on a level and straight track. With a heavier loading you can increase the capacity of trains.

Witness does not know that there is anything peculiar being done in New England with their shippers to obtain heavy loading of cars any more than in the rest of the country. The railroad executives have set a bogey of 30 tons per car, and all the roads have been doing their best to bring it up to that. Witness does not know that anything more is being done in New England than elsewhere.

There has been some improvement since that bogey was set up, but as to the relative improvement in New England and elsewhere, witness does not know. The railroads are not operating in New England on tonnage ratings. The progress made in other parts of the country in using tonnage ratings has saved a great many miles. The progress made in other parts of the country in car loading has saved a great many miles. Witness has seen statistics which indicate a commendable progress in reaching that 30 tons per car.

The New England roads tried to follow the request of the railroad executives to reach that goal, and witness has seen, for the Boston & Maine Railroad, some weekly bulletins in graphic form, which were designed to get the interest of the employes. The Bos-

1483 ton & Maine was going up. There was an effort on the part of the Boston & Maine to inspire interest on the part of employes.

In making his computation of 100.64 miles as the average haul

in New England, the witness included the Grand Trunk, but did not include the Canadian Pacific. He has explained that if they were doing it over again the Grand Trunk would be omitted.

Asked whether he attached any significance to the difference between the average of 153.39 and the average of 141.23 in the same connection, the witness said:

"My guess was that Mr. Williams' computation included a lot of Class 2 railroads that I did not include in my exhibit. He had the advantage. My exhibit showed the detail, but his average is not supported by the detail; so I do not know about that."

The inclusion of the Class 2 roads would have made a smaller figure. If, on the other hand, they had included the Rangeley Lakes road, the Moshassuck Valley, another road that runs up from the Hoosac Tunnel, the Woodstock Railroad and several other Class 2 roads, it would have brought down the average. Another reason for not including the Class 2 roads in his exhibits was that he did not have the data.

1484 The Interstate Commerce Commission recognizes a distinct difference between Class 1 and Class 2 roads. Witness was following out that distinction. If you have the number of ton miles in any district and the number of tons of freight originating in that district, it is not correct to divide the number of ton miles by the tonnage originated to get the ton miles.

The tonnage of the A. B. & C. consists of tons which originate on that road and those received from its connections. The ton miles reported on that road are both for the originated tons and the tons received from connections. It would be inaccurate to divide the total ton miles by the originated ton miles, because some of the ton miles are made by the tons received from connections.

From 1887 to date the Interstate Commerce Commission has made an effort to do that same thing; but there is this important qualification, that that is for the railroads of the United States, considered as a system. It would not be proper to do that for a single road or a group. The average haul per road is obtained by dividing the total number of ton miles by the total number of tons handled.

If the question is whether it is proper to divide the total tons, both originated and received from connections, witness would say that that would be proper. Witness' objection to Exhibit 131 was

1485 to the importance attached to a fallacious ratio.

The figure expressing the ratio between road train movement and road and yard switching for the New England lines would have more bearing on this case—the relation of yard switching to car miles or train miles—than it has to the number of trains. But the number of trains would have some bearing. What witness is objecting to is the assumption that the yard work in New England is less because the ratio of yard and train switching miles to total road locomotive miles is less in New England than in Trunk Line. Witness thinks these figures are accurately reported by the New England roads. They have been reported for years according to the Interstate Commerce Commission Classification. There is no question about their accuracy.

Witness would not necessarily consider that the size of the manufacturing plants in New England is indicated by the capitalization. It would give some indication. He thinks the Examiner asked that question because it would be a very easy method of showing the relative density. Investment would bear some relation, but the size and product would be better.

Witness attaches importance to the figure he gave showing the per cent. of net ton miles to gross ton miles in the New England trains. It shows the ratio of the live or paying load to the gross load. It is an important figure. The efficiency could be considerably improved by increasing that to the level of the roads in trunk line territory; but one reason that it is low, or, rather, the reasons that it is low are those which the witness gave. It is a reflex of operating handicaps.

1486 The ratio of live load to total load has to do with car loading.—not with train loading. It has something to do with train loading and adjusted tonnage has something to do with train loading. More attention to the adjusted tonnage ratings would not increase that. It might increase the train load, but that is a reflex of the car load. The use of adjusted tonnages is to take more accurate account of the varying resistance of cars which are lightly loaded and those which are heavily loaded. Witness does not know what studies are now being made looking to getting rid of the constructive mileage on these short roads; but he does know that while he was connected with it that was a live subject all the time.

The general traffic situation in the Eastern rate group in November of 1920 was that the traffic was moving freely, and witness' recollection is that it was beginning perceptibly to fall off.

He does not know whether any locomotives were laid up during that month by the New England lines, or by their Western connections.

Witness did not state that passenger traffic in Massachusetts is fully remunerative. His statement was that it was more remunerative than the freight.

1487 Witness knows that by the statistics, based on the separation between passenger and freight traffic, prescribed by the Interstate Commerce Commission, that he is satisfied to rest his judgment on that separation.

Witness would say that there is considerable distribution still there out of seaboard towns in Massachusetts and Connecticut to local points within those New England states. Some of that is carload and some less than carload.

Witness does not know the length of haul on any of that traffic. It all goes into the average. If the per diem rate is set at the average cost of owning all cars, then it would not make any difference on the average whether a road owned a surplus of cars or had to pay per diem on a shortage. Of course, the per diem rate is based on average conditions, and would not be sufficient to compensate for cars recently purchased; but, on the other hand, it pays more than the cost of the interest, maintenance, and other charges on an old car which might have cost eight or nine hundred dollars. On the

whole, if the per diem rate of $1 is set at a figure which represents the average cost of owning an average car, in essence it does not make any difference whether the road owns all the cars it uses or pays per diem on a number of the cars it uses. The per diem is intended to be based on the average cost; but witness is inclined to think that it is, possibly, a little bit under-stated; that is, in the nature of a compromise. Witness thinks the actual cost of
1488 owning cars is possibly a little bit more than a dollar a day.

Car mileage prior to 1902 was charged to operating expenses, in the group called "Conducting transportation"—the whole charge. It was either a charge or a credit to operating expenses. When per diem was adopted in 1902, the Interstate Commerce Commission ruled that the 20 cents per car day should be divided between expenses and income. If the balance were a debit, then 10 cents per day, or one-half of the charge, should be charged to operating expenses and one-half of it should be considered a deduction from income; or, if there was a credit balance, one-half of it should be credited to operating expenses and one-half should come in under other income—the theory being that the per diem rate represents both expenses and charges. It is supposed to take care of interest on investment, and also maintenance. Maintenance is an operating expense; interest on investment is a capital charge. So, we split it. But after one or two years of experience with that method, the Interstate Commerce Commission ruled that the entire balance, either credit or debit, should be taken out of operating expenses and considered as an income item.

Recess until 2 P. M.

1489 A. J. ANDERSON, heretofore called as a witness on behalf of the defendants, was recalled and testified further:

Direct examination:

Witness did not have any data as to actual tonnage from which he could determine the principal tonnage points on the B. & O., but in response to Mr. Choate's request for a statement showing the principal tonnage points on the B. & O. with their prorating mileages versus actual mileages, and a statement of points having a greater prorating mileage than actual mileage, he has prepared an exhibit based on general information as to the importance of the towns in their particular localities. In the absence of definite evidence as to the relative tonnage importance he has selected 28 points on the Baltimore & Ohio east of the Ohio River, the selection being based on his general knowledge as to the importance of these particular cities, that is, his own judgment.

Witness introduced a paper which was received in evidence and marked Defendants' Exhibit 194, Witness Anderson.

Witness stated that in his Exhibit 79, under the heading "West of Philadelphia to Washington, D. C.," of B. & O. stations, and opposite New London, Conn., the prorating in excess of actual

mileage was shown as 81 miles. That was calculated on the prorating mileage of 200 miles, which was in error. The fact is that the prorating mileage is 100 miles, so that the actual mileage exceeds the prorating mileage by 19 miles.

Cross-examination:

Witness' Exhibit 194 represented stations selected because they were the most important stations in the territory and, in some respects, as to the locality. It was not prepared with particular respect to the inbound or outbound tonnage. For instance, he has shown Lexington, Va. They probably have some other more important tonnage points that are not shown in here, but that was the most important point in that particular locality, and they showed that as representative of that particular section. To some extent
1490 the witness means that he took his road by sections and selected from each section one representative point, as being representative of the percentage arrangements. Witness could have limited this exhibit to the most important tonnage stations and made the excess mileage less than it really is, as indicated by this exhibit. With witness' road the maximum tonnage producing points are in the vicinity of Pittsburgh and the Ohio River. Generally speaking, in all that territory their actual mileage exceeds the prorating mileage. Scottdale, Pa., is quite an important iron and steel point. If witness had made this exhibit up on the basis of tonnage, there might be some additional stations. Most of the 28 stations shown are the heaviest producing tonnage stations on witness' line. But tonnage has been ignored to the extent of going to certain sections of witness' line and picking from those sections a representative station. The prorating miles and actual miles here shown are the prorating mileage accruing to the lines west of the New England junctions. It shows that the lines west of the New England junctions get 5 per cent more on the average than their actual mileage prorate. This covers only the part of the haul west of the junction.

Witness' road does not get the same prorating mileages west of the junction on traffic from every point in New England. This statement refers to traffic to and from the Boston & Maine and the New Haven roads.

1491 On the first item, Baltimore, Md. via Communipaw, witness' road gets 200 miles. It gets that prorating mileage on any business into New England on those two roads, the Boston & Maine or the New Haven. It is witness' understanding that on all New England traffic his road gets that prorating mileage, regardless of the New England point of origin and destination. It is witness' understanding that his road gets the same prorating mileage on New Haven traffic as on B. & M. traffic via Communipaw.

Witness' road does not get the same prorating mileage via other gateways.

Via the Mechanicsville gateway it is witness' understanding his road gets the same prorating mileage, regardless of the point of origin or destination in New England.

WILLIAM J. CUNNINGHAM resumed the stand and testified further:

Cross-examination continued:

Witness' exhibits were not prepared with comparisons of individual roads in mind, but rather of group figures, and were significant only as group figures. Of course, the details were shown, so as to support the general averages.

Asked whether in his opinion any evidence that he has offered or all the evidence that he has given could safely be accepted by the Commission as establishing that the unit costs of the New Haven, for example, have increased to a greater extent during the
1492 past 15 years than the unit costs of the Central Railroad of New Jersey, for example, the witness said:

"The value of these exhibits would not be as great for the comparison of the New Haven and the Central Railroad of New Jersey. The figures in the exhibits would be indicative, but the exhibits were designed to show results as a group, and if I were to make a comparison between the New Haven and the Central Railroad of New Jersey, I would have gone about it in a somewhat different way, so as to evaluate the differing factors and try to have that viewpoint in mind."

Asked whether his figures were not in fact indicative of something which, while perhaps true of the two groups, is not at all true of the Jersey Central as compared with the New Haven, considered individually, the witness said:

"Yes; that is quite true, that the average for a group, or the indication of a comparison of the average of two groups, might not apply to an individual road in either group."

Asked whether, accepting his reasoning that the New England roads are handicapped because their average haul is shorter than that of the roads west of the river, as a group, if that argument have any force, it must also be true that since the average haul of the Jersey Central is only about 70 miles, whereas the
1493 average haul of the New Haven is something over 100 miles, therefore the Jersey Central has been more prejudiced by the increasing terminal costs of the last 15 years than has the New Haven, for example, the witness said:

"I think that is a fair statement."

Asked whether, if the Commission comes to the point in this proceeding of trying to determine whether or not the relative costs of the New Haven and Jersey Central on traffic interchanged between them and originating and destined on those two lines have so changed in the last 15 years as to prejudice one of the parties, then the conclusion from witness' argument is that it is the Jersey Central that has been more prejudiced by the trend of costs during these 15 years, the witness said:

"I think that reasoning is sound."

Asked whether, if that reasoning be sound, then, in the same fashion that the New Haven is asking the Interstate Commerce Commission to require the roads west of the river to increase its divisions because of the alleged fact that terminal costs have increased more in the last 15 years in New England than west of the river, the Jersey Central would have an equal reason to file a complaint with the Commission asking that for the same reason the divisions
1494 which it receives on traffic interchanged with the New Haven should be increased rather than reduced, the witness replied:

"The logic is sound."

Asked whether what he means is that there is so far in the case only statistics affecting all the traffic of the roads compared, and that those statistics covering all traffic are not representative as to the pertinent facts affecting the only traffic that is in the case, namely, the interchange traffic, the witness said:

"It has some relation. It has not an exact relation. It is relevant, but not exact. If the proportion of this local traffic in the two groups is exactly the same in proportion, it would be entirely relevant and exact; but, inasmuch as the proportion is not the same, to whatever extent it is not the same, of course, that absence of a separation in costs and tonnage would have a bearing on the results."

It is a fact that as to the interchange traffic the average load per car is identical for the New Haven and for the roads west of the river with which it interchanges.

If they were dealing solely with the problem as to the relative net ton miles per car day of the two groups on interchange traffic, they would have to take a uniform and constant factor in that fourth column from the last instead of a factor of 23½ tons for the
1495 New England roads and 30.3 for the trunk lines, shown on witness' exhibit No. 21, and it would probably be more for the New England lines than is shown on this exhibit, and less for the trunk lines and C. F. A. lines that are shown in this exhibit. The final result would modify the indication of the exhibit.

Witness thinks that the Central Railroad of New Jersey and the New Haven road would show just about the same under those circumstances. This is not a case of the New England roads against the Central Railroad of New Jersey, and it was not intended that these exhibits should be used for a comparison of individual roads.

Witness said that if the mileage basis of car hire had been continued, and if the mileage rate had been increased in the same percentage as the per diem rate has been increased, since it was substituted for the mileage, the cost to the New England roads would have been $17,000,000 less. The reason for that is that the average miles per car day in New England are very much less than 33 miles per car day. The burden of the change from mileage to per diem depended on the difference between this average and 33 1/3 miles per day, and, inasmuch as the Central Railroad makes less than 33 1/3 miles per day, of course it lost by the substitution.

1496 Witness did not mean to use the word "lost." What he said was that if all of these "ifs" had occurred, the cost to the New England road would have been $17,000,000 less. He did not mean to say that they had lost $17,000,000.

Redirect examination:

There is quite a large volume of less than carload business which moves out of New England to points as far west as the Mississippi River. Witness does not know what that volume is, but he knows there is a considerable volume. It is overhead business, very largely, for the Trunk Lines and C. F. A. lines, going to points like St. Louis, St. Paul and a good deal farther.

In the cross-examiner's hypothsis comparing the New Haven with the C. N. J., his premises do not include the following facts: The fuel cost to the New England roads has increased relatively more than the fuel cost to the Central Railroad of New Jersey. Relatively the difference in wages has been more in New England. The Central Railroad of New Jersey has a very large volume of overhead business coming to it from the Reading and the Baltimore & Ohio.

There are many other things besides those involved in the cross-examiner's question that bear upon the question as to how the Commission should view the adjustment of these divisions.

Recross-examination:

Witness is perfectly willing to go along with the statement that on account of the heavier grades on the Central Railroad of New Jersey, its pounds of fuel per thousand net ton miles would be more. The grades on the Central Railroad are very much heavier than those on the New Haven.

1497 Asked whether, without having the relative fuel consumption of the two roads before him, he can intelligently answer the question as whether the New Haven's cost of fuel or the increase in the New Haven's cost of fuel has been more burdensome than the New Jersey Central's increase, the witness said:

"The cost per ton has increased relatively more than in Trunk Line territory, on account of its greater distance from the mines. I should have to look up the figures to see just what bearing it would have on the ultimate number of tons consumed. My impression is that when you take the freight business as a whole, the pounds of fuel per thousand ton miles would be as much on the New Haven as on the Central Railroad of New Jersey, when you take the larger number of light trains and mixed trains."

As to the proportion of the coal bought under long term contracts, that does not change the fact that at a certain given time under given conditions, whether it is long term contract or spot coal, it costs more to get coal delivered in Bangor or Rutland or

Providence or Boston than it does to get it delivered at junction points on the Central Railroad of New Jersey.

Witness' statement that the wage increase has borne more heavily, by any relative standard, on the New Haven line than it has on the Jersey Central, is based on actual knowledge of what the Central Railroad of New Jersey was paying in their train service and different classes of service a few years ago, as compared to what was paid on the New Haven. Now they are all standardized. That is a general belief that witness has, but if asked to prove it now mathematically, he cannot do it because he has not the data here. Witness is not guessing. He has not tried to guess in any of these
1498 statements. He has tried to avoid guessing.

Witness was answering with regard to the New Jersey Central from his knowledge of what was being paid in Lackawanna territory when he was connected with the Lackawanna Railroad. The Jersey Central comes pretty nearly to being in Lackawanna territory, since one terminus is at Scranton, and the center of the Lackawanna is at Scranton. Between Scranton and tidewater, or where the Central Railroad gets as near as it does to tidewater, the conditions are similar.

Witness remembers relatively that the wages paid by the Lehigh Valley and the Central Railroad of New Jersey and the Lackawanna Railroad were relatively higher than were paid in New England, from 1900 to 1907, or sometime during that period.

There was a general trend of increases on the New Haven between 1907 and 1918. Witness has information that would lead him to conclude that the New Haven, during those 13 years, had not caught up with the level of the Jersey Central. From his analysis of the New Haven operating results while he was with the Railroad Administration, he found that the burden of the wage increases was felt peculiarly by the New Haven, and even more heavily by the lines in northern New England and in Maine.

What he has said about the New Haven is true of the Bos-
1499 ton & Maine.

S. E. MILLER, called as a witness on behalf of the complainants, testified:

Direct examination:

That he is superintendent of transportation, Boston & Maine Railroad, and has occupied that position for 4 years. His previous experience was that of telegraph operator, freight clerk, ticket agent, agent, train dispatcher, his total transportation experience covering 22 years.

He has made an examination of Exhibit No. 141, presented by Mr. Williams, showing embargo restrictions and showing the number of cars held on the Delaware & Hudson by reason of Boston & Maine embargoes.

The conclusion he has reached with reference to Exhibit 141 is that it is admitted that the Boston & Maine found it advisable to

issue several embargoes during this period, and further, that they were not at all times able to accept cars from their western connections, including the D. & H., as freely as offered.

Witness would say that these embargoes were due to a condition that prevailed quite generally throughout the country in 1916 & 1917. There was a grave shortage of equipment at that time, due to the fact that the cars under load were not being moved nor-
1500 mally, and it was imperative, if relief was to be obtained, that the loading of cars which could not be handled promptly should be restricted. The American Railway Association took official action with a view to obtaining relief from that situation. As a concrete example, Bulletin No. 12, issued by Mr. Fairfax Harrison, Chairman of the Executive Committee of the American Railway Association, dated Washington, May 4, 1917, and addressed to all railroads, read in part as follows:

"The European war is responsible for conditions which have caused very large increases in traffic on American railroads whose capacities are now overtaxed, and they are unable to respond promptly to all demands made on them."

In issuing that bulletin the American Railway Association had reference to railroads in general. In fact, another part of this Bulletin No. 12 just referred to contains the following statement:

"One of the greatest opportunities to increase car efficiency lies in better control of an unusual traffic movement through placing embargoes promptly so as to avoid congestion and delays. The importance of keeping yards and terminals, especially in large cities and sea ports, clear of accumulations which cannot be handled expeditiously, cannot be over-estimated. The experience of the past
1501 year has shown that the number of cars held in such accumulations, together with those unduly detained by shippers, have been the chief cause of car shortage."

That shows that in the judgment of the American Railway Association the embargoes were the most effective weapon with which to handle this situation. So far as witness' road was concerned, the difficulties arising out of that general situation were emphasized by additional burdens that were peculiar to his line. Prior to 1915 and 1916, a very large percentage of the coal consumed in New England, particularly the bituminous coal, moved in by water, and after the war overseas, the bottoms became more serious, and this coal traffic was thrown to the rail routes. For the calendar year 1920, while the total coal tonnage both rail and water, handled by the Boston & Maine, was about 11 per cent less than the record figures of 1918, the all-rail tonnage for the calendar year 1920 exceeded the 1918 figures, which were the greatest ever handled all-rail, by 3 per cent.

An exhibit as to that was received in evidence marked "Complainants' Exhibit No. 195, Witness Miller."

Prior to this period of congestion witness' road received on the average through the year, by months, about 100,000 tons a month, by water. When this difficulty arose practically all of this water movement of coal was diverted to the rail routes. That was an additional burden superimposed upon witness' roads other difficulties at that very same time. Witness' line has to send back better than
99 per cent of those coal cars empty from stations on his
1502 line. They have to send them back through the same gateways from which they are received. The handling of these cars added very substantially to the operating difficulties which they then encountered. Most of that coal came through Rotterdam and Mechanicville.

At that time witness' line had a very heavy run of export traffic, increasing from 671,000 tons in 1915 to 1,067,000 tons in 1916, and then there was a slight drop to 942,000 tons in 1917. This, as well as the increase in manufacturing during the war, added to the obligations placed upon witness' line.

Witness has made an analysis of Mr. Williams' Exhibit No. 141, and wishes to show that the scope of these embargoes issued by his line was not such as to cause as serious a hardship on the Delaware & Hudson or the other lines as might at first be supposed, without making a careful analysis of the individual embargoes. It is apparent that in figuring the number of days that restrictions were in effect for the first five years, as shown on page 1 of the exhibit, that every day has been counted when any restriction, regardless of how limited it may have been, was in effect. If there was a single day when only two or three embargoes were in effect on individual commodities, the exhibit has included that day as one day in
1503 reaching the total, even if the line was entirely open as to other commodities.

For example, Exhibit No. 141 shows that in 1916, traffic was restricted on account of Boston & Maine embargoes to the total of 145 days. A large portion of this total time covers periods when the restrictions were only against traffic destined to points on or via the New Haven and Central New England railroads. These embargoes against the traffic for those roads were placed to prevent circuitous routing of traffic. There was a general movement at that time, or a general plan to restrict unnecessarily long routes. And furthermore, those embargoes were placed so as not to interfere with the traffic which necessarily must go via witness' line. Embargoes issued by the Boston & Maine during the year 1916, which, in witness' opinion, could really be considered as having much effect on business coming from the D. & H., covered a period of 59 days only, and the longest single period of any of these embargoes was 19 days, from November 13, to December 2nd. Again, in the year 1917, Exhibit 141 shows traffic restricted on account of B. & M. embargoes, 237 days. A very large percentage of this total time, restrictions were only imposed on less than carload freight, which required handling at Boston & Maine transfers, or stations short of final destination.
Embargoes placed by the Boston & Maine in that year, 1919,
1504 which witness feels could be considered as having any material effect on traffic for the Delaware & Hudson, were in

effect a total of 63 days, and the longest single period during that year was 24 days, from December 7th to December 31st. An analysis of embargoes placed during the years 1916 and 1917 will show that in most instances exceptions were made which permitted shipments of livestock, perishable freight, food and feed, coal and other kinds of fuel, which together, constituted from 60 to 75 per cent of the traffic to be moved.

Furthermore, these embargoes were mostly all of short duration, and were placed to control the movement of traffic and prevent the loading of cars which witness' line was not in a position to move promptly.

Again, along in 1918, a considerable proportion of the time that the traffic was restricted on account of Boston & Maine embargoes, these embargoes covered traffic to and via the New Haven road again, which was to prevent circuitous routing, and others were against l. c. l. shipments only. In other words, of the total of 104 days shown in Exhibit 141, only 60 days did the Boston & Maine embargoes exist against carload traffic ordinarily moving via witness' line, and during 43 of the 60 days, in other words, from January 16th to February 28th, they had very severe weather conditions.

1505 Furthermore, exceptions were made to coal, livestock, perishable freight, food, feed, fertilizer, shipments of the United States Government and its Allies, shipments for railroads and public utilities; so that probably more than 75 per cent. of all traffic was not shut off. For the period from August 16, 1918, to February 19, 1920, but one embargo was in effect, and that for a period of one week only, on account of the labor trouble in the mechanical department forces in August, 1919.

In February and March, 1920, the Boston & Maine operation was more seriously affected by weather conditions than in any previous period. They had many snowstorms, followed by rain and thawing weather, which quickly turned to extreme cold, so that many of their yard tracks were covered with solid ice, and hundreds of cars were frozen to the rails in ice reaching to the axles. For days at a time they were not able to operate trains on branch lines, nor even on some portions of their main lines.

The embargoes placed in 1920, during February, March and April, and even May and June, were chargeable to these weather conditions just mentioned, and those placed in July, August and September were to prevent the loading of cars which could not be handled promptly, and probably to heavy business offering at that time; no doubt, in a measure, due to the anticipated increase in freight rates.

1506 Exhibit 141 shows traffic restricted by Boston & Maine embargoes in 1920, a total of 299 days. There was one embargo alone, which is shown on page 12, which was placed May 4th and cancelled September 16th, which accounts for 135 days of that time, and that embargo was only against traffic to points on or via the New Haven road.

In 1920, in particular, the Boston & Maine issued permits to allow

certain individual shipments to come forward when the consignees were badly in need of the material, and when witness' line found, by investigation, that they were in a position to unload the material promptly if it was allowed to come forward. So that even if the embargo existed, it did not mean that the traffic was stopped.

Exhibit No. 141 shows only 826 cars held by the D. & H. for the Boston & Maine, during the year 1918, and none held in 1919. Witness believes that this clear record in 1919 is a true picture of the actual conditions, rather than due to the fact that no per diem was in effect at that time.

A paper was received in evidence at this point and marked Complainants' Exhibit 196, Witness Miller.

Exhibit 196 shows, in Column 1, the periods during which the Boston & Maine had embargoes against carload traffic coming from the D. & H., routing to and via its line, other than traffic for and via the New Haven road. In the other columns it
1507 & 1508 shows the daily average number of cars received and moved east from the D. & H., and the total for the Western gateways, during the embargoed periods, and during the entire year. That would show that with the exception of February, March and April, when we were encountering the severe weather conditions, witness' line received during the embargo periods practically as many, and in two instances more, daily average cars than they did during the entire year.

The figures in the last three lines of Exhibit 196, in the last two columns, show that they moved east from their western termini during those last three periods that embargoes were in effect, an average number of cars considerably in excess of the average during the entire year. That exhibit tends to confirm testimony already given, to the effect that an embargo is more a regulation of traffic than a stoppage of traffic.

That exhibit is simply to show that during the embargo periods, excepting February and March, when weather conditions rendered it impossible, that they were handling more than a normal business, there has been a steady increase in the amount of traffic handled on the Boston & Maine, and in the years 1918 and 1920 it exceeded all past performances, as indicated in another exhibit.

1509 The paper referred to was received in evidence and marked Complainants' Exhibit No. 197, Witness Miller.

Exhibit No. 197 shows the net ton miles moved by years, for the last 10 years, 1920 reaching the highest during any time in that period. That exhibit shows a general upward trend in net ton miles, in all traffic.

A paper was received in evidence and marked Complainants' Exhibit 198, Witness Miller.

Exhibit 198 shows the net ton miles per car day for the last 10 years, and the car miles per car day on the Boston & Maine Railroad during the same period. That period was selected simply to show the general improvement over a period of years. Exhibit No. 141

deals only with the period back to 1916. We went that far, and another 5 years back.

Asked whether he had any comment to make on the general nature of the embargoes declared by the Delaware & Hudson Company itself, witness said:

"Only this, that if the inability of the Boston & Maine to accept cars more freely from the Delaware & Hudson caused them any great embarrassment or increased expense at all, it will, I think, be evident to anyone analyzing the embargoes placed by the Delaware & Hudson Company themselves, that in only a few instances did they, in their own embargoes, prohibit the loading of traffic on their own line. Invariably it was simply stopping the load-
1510 ing of freight from lines beyond. Furthermore, if at any time they had felt it necessary to more promptly reduce any accumulation of cars on their line, this could have been accomplished more quickly by discontinuing loading on the line of the D. & H. The Boston & Maine Railroad had difficulty in obtaining advices from our Western connections as to the number of cars in transit to or via its line, and could not, in many cases, learn that it was advisable for us to place an embargo against our connections until a considerable number of cars had accumulated on the lines beyond us. I think our connections know from experience, probably as well as we do ourselves, what our capacity is for accepting cars and they of course, are in a better position than we are to see how fast the traffic is coming for delivery to our line, and at all times have it in their own hands to prevent accumulations on their line by themselves placing an embargo before these accumulations became a burden to them."

Under car service rules any road placing restrictions against the acceptance of cars is subject to per diem reclaim, and if such failure to receive cars shall continue for more than three days, the delinquent line shall thereafter, in addition, be responsible for the per diem on all cars, wherever in transit they are thus held
1511 back for delivery. That is the present per diem rule, 15-B.

The records, therefore, of cars held for the Boston & Maine at various times probably include a great many cars in transit which were in reality being moved up toward the gateways as far as possible, as far as conditions would permit, and are not necessarily cars which were actually stored. To illustrate this, witness would call attention to page 31 of Exhibit 141, cars held for the Boston & Maine in the month of May, 1920. It will be noted that the first three days only a small number of cars were reported. May 3rd, 249; May 4th, 816; May 5th, 967, and May 6th, 2,186. It must be assumed that a large proportion of this increase is not due to any change of conditions within 48 or 72 hours, but simply due to the fact that the rule permits including a great many more cars on the line after the third day.

Without seeing the New York Central exhibit, or the exhibit which pertains to conditions on the New York Central Railroad, witness would simply say that he feels that all that has been said in con-

nection with restrictions against Delaware & Hudson cars held by them is equally true with respect to conditions for the New York Central route, except possibly one thing, and that is that the New York Central invariably prohibited the loading of traffic from stations on their own line when they placed their eastbound em-
1512 bargoes. That would be the method of relieving any congestion more quickly.

Papers were received in evidence and marked Complainants' Exhibits 199 and 200, Witness Miller.

Asked to make any comment that he wishes to make about these exhibits, the witness said:

"Exhibit No. 199 shows cars received from the Delaware & Hudson and from Western gateways, which total figure includes the cars received from the D. & H. at Mechanicsville and Troy, and the New York Central at Rotterdam and Troy. I would like to call attention to the fact that in 1920 the average daily receipts for the year from the D. & H., as shown in the next to the last column at the top of the sheet, show 505, or considerably in excess of the daily average during any previous year of the five. In Exhibit No. 200 I call attention to the fact that the average number of cars for the year moved east from the Western gateways in 1920 is 840, or only 13 cars less than the average for the years 1917 and 1918, notwithstanding the fact that in February, 1920, they moved approximately 5,000 cars less east in 1920 than in 1917 or 1918, and in March of 1920, approximately 7,000 cars less than in 1917, and 9,000 cars less than in 1918. These small movements in February and March, 1920, were due to the severe weather conditions before explained."

1513 The low figures during the winter were due to conditions absolutely beyond the control of the Boston & Maine. They mdae good the deficiency before the year was over, so that their average shows up very well for the year.

In October, 1920, Exhibit No. 200 shows 30,056 cars moved east from the Western gateways, which is the largest movement in any month during those five years, with the exception of May, 1918, when it was approximately 1,000 cars greater.

These Exhibits 199 and 200 represent number of cars, and not tonnage. Those were not necessarily loaded cars. They represent the total cars moved east. Prior to November and December, 1920, practically all cars moved East from the Western gateways were loaded cars, but since business has fallen off, and the surplus of equipment has become common throughout the country, they are moving East now, and did through November and December and January, a considerable number of empty cars daily, so that this does not reflect the tonnage. There generally is a lessening of the number of cars in those months, of September, October, November and December, and in the summer month of August. The weather generally is severe, especially as you get into December. The exhibit does not necessarily indicate anything in connection with tonnage. Witness

has not anything here to show the tonnage moved east from
1514 the western gateways. The exhibit showing the total net ton miles simply shows for the road as a whole, and not from the western gateways. The tonnage of witness' line began to fall off to a marked degree in September. It has been going down steadily since September, more particularly from October on.

Cross-examination:

Witness has quite carefully examined Exhibit 141 as it relates to Mechanicsville. He has found no errors on page 13, in the statement of embargoes. The embargoes placed by the Boston & Maine, as shown on page 12, prohibited the shipment of coal generally during the period from May to September 1st, on 45 days, although part of the time coal for public utilities was accepted. During the year 1919, there was just as complete data of any embargoes issued in 1919 as to any other time. There were no reclaims made in 1919. Witness' Exhibit No. 196 shows that his line moved on an average 840 cars per day during the whole year, from the Western gateways, Mechanicsville, Rotterdam and Troy. The figure 928 is the average number of cars per day that moved east between July 26th and September 9th. Probably 90 to 92 per cent. of these cars were moved to Deerfield. About 85 or 90 per cent. of the number that
1515 went to East Deerfield would go all the way to Ayer, and 30 per cent. of the number that went to East Deerfield would go on to Boston. Mechanicsville makes approximately 28 different classifications. The cars had been classified for Ayer at Mechanicsville. There is no reclassification of Ayer or Boston cars at Deerfield.

GEORGE H. EATON, heretofore called as a witness on behalf of the complainants, was recalled and testified further:

Redirect examination:

Asked what he had done in compliance with a request for an exhibit illustrating the road-to-road percents that were in effect on class rate traffic from Chicago to New England during the Federal control period, the witness said:

"During the discussion of road-to-road percents, the Chairman asked for an exhibit illustrating the road-to-road per cents that were in effect on class rate traffic from Chicago, Ill., to New England during the Federal control period via routes made up of two, three or more lines, using for the purpose the first and sixth class rates.

"The road-to-road per cent. plan is merely a simplification of the percentages now used for dividing revenue. The process necessary to obtain the per cents. is as follows:

"First, each road is treated as a unit, or, expressed in another way, all stations on each road are considered as in one group.

1516 "Second, for a given period, not less than 12 months the entire revenue accruing to the lines on all traffic between two given roads via a given route is ascertained and per cents determined according to the relation of each road's proportion to the total

revenue. In view of the method employed in determining road-to-road per cents., it is obvious that an application of such per cents on traffic moving between one point of origin in one territory (for illustration, Chicago, Ill.) and one point of destination in New England territory (for illustration, Boston, Mass.), or New England as a whole, would not fairly represent or illustrate the working of the road-to-road per cent. plan.

"A proper illustration would consist of the application of the road-to-road per cents. on all traffic moving between all points on two given roads via one or more routes. Such an illustration is now presented in the form of an exhibit, in lieu of that asked for by the Commission. For this purpose the Wabash Railroad was selected as a typical Central Freight Association territory carrier, because traffic between that road and New England enters or departs from New England via numerous working routes."

The statement referred to was received in evidence and marked Complainants' Exhibit No. 201, Witness Eaton.

The witness continued:

1517 "The exhibit now submitted is the result of a tabulation of all traffic moved during the month of October, 1920, between the Wabash Railroad, on the one hand, and New England as a whole, on the other, via all the routes that were employed in the movement of the traffic for that period.

"In the upper half of the exhibit is shown a total revenue for all lines of $494,313.39, which amount, distributed under the existing per cents or established divisions, gives to the New England lines as a whole $131,147.12, and to the individual roads outside New England the balance of the through revenue, distributed among them as indicated.

"In the lower half is shown the same total revenue and the distribution under road-to-road per cents. that were in effect during the Federal control period; the distribution on this basis giving to the New England lines as a whole $131,903.02, or $755.91 more than they received under established divisions and allotting to the roads outside of New England in some instances a little more and in other instances a little less than they received under established divisions.

"The two lower lines indicate the variation in revenue as between the distribution under established divisions and unde road-to-road per cents.

1518 "It will be noted that there is no variation in the revenue of the Canadian Pacific and Grand Trunk Railways. That is due to the fact that during Federal control road-to-road per cents. were not employed on traffic interchanged with thee Canadian lines.

"It must be understood that road-to-road per cents. should be predicated on at least 12 months' traffic and revenues, and that the application of such per cents to any one month's business might, and probably would, show a variation—either an increase or a decrease—when compared with revenues apportioned by the use of existing percentages; while, on the other hand, when applied to an entire 12 months' business, the result would be practically the same

money under the road-to-road per cent plan as under the existing percentages.

"What I have stated has to do with the road-to-road per cents. The road to New England per cent. plan, which has been mentioned and discussed, involves merely one more process than already described in the road-to-road per cent. plan, namely, to determine the combined New England per cent.

"This is illustrated as follows: On the exhibit it is shown that the total revenue accruing to the New England lines under the road-to-road per cent. plan is $131,903.03. Of the total freight
1519 revenue of $494,313.39, the New England roads' proportion is equivalent to 26.68 per cent. This figure represents the combined New England per cent. to be applied on all traffic originating or terminating in New England and originating or terminating on the Wabash Railroad, via all routes.

"I have only illustrated the road-to-road per cent. and the road to New England per cent. plan as applied to traffic originating or terminating on the Wabash Railroad. The same process would be employed in determining the combined New England per cent on traffic originating or terminating upon other roads outside of New England.

"The road to New England per cent plan, while reflecting the existing percentages, serves as a simplified factor for the division of revenues, and also as a simplified unit that may be increased or decreased, according as conditions and circumstances may warrant.

"For illustration, should it be found in this case that the New England lines as a whole are entitled to an increase of 15 per cent. in their division of joint rates with the Trunk Line and C. F. A. roads, the combined New England per cent. of 26.68 would be increased to that extent, or to 30.68 per cent.

"The percentage, applied to the total Wabash Railroad traffic, as shown in the exhibit, would give the New England
1520 lines as a whole $151,688.48, or an increase of $19,785.45, which is equivalent to an increase of 15 per cent.

"We must recognize that the use of road to road per cents which were established during Federal control may not in all cases be accurate, and that necessarily any plan of this kind should be worked out by a careful analysis of the revenues for a given period. This would consume some time, but probably not in excess of three months; and, once computed, it is available for all time or, at least, until such time as conditions and circumstances will warrant a change.

"There is one feature about this exhibit that I want to make clear. The division of the money between the New England carriers is shown. That does not mean, for instance, that the Boston & Maine Railroad, which heads the list, earned $59,054.02. That revenue was earned on Boston & Maine traffic. That traffic might have moved merely over the Boston & Maine Railroad within New England, or it might have moved over other New England roads and also the Boston & Maine. So that if the word 'traffic' appeared after the name of each New England road, I think the exhibit would be entirely clear."

Witness has given consideration to Mr. Maxwell's testimony.

The following question was then asked: "At the close of the last day's hearing, Mr. Rich, representing some New England shippers, made a suggestion to the Examiner that they might, at some later time, present a request to be permitted to intervene. Have they had any communication with you about that?" Witness replied: "They have. I have received a letter signed by Mr. Rich and by Mr. Chandler, on behalf of various New England industries, Chambers of Commerce and Associations."

Asked what the comments of Mr. Maxwell involved, the
1521 witness said:

"The inference I draw from Mr. Maxwell's testimony is that the revenue required by the New England roads should come from a change in the rate structure; and, as I read the record, his suggestions are:

"First. That the Anderson scale be established immediately, regardless of the production of Fourth Section violations;

"Secondly. That rates from Trunk Line points to the Hudson River should be increased, if the Anderson scale is put in force in New England in its full measure, in order to satisfy the views of New England industry;

"Third. That there should be a revision between New England and Trunk Line territories—an upward revision—at least in order to reflect the same number of miles as the Anderson scale produces;

"Fourth. That the arbitraries, Boston over New York, eastbound from C. F. A. territory be increased.

"I do not intend to make any criticism of those suggestions, but I do think that it is proper to point out some things that might well have been stated when the exhibits were offered.

"In the first place, if the rate structure was rebuilt as is suggested, I think it is very doubtful if the New England lines would
1522 receive by that revision the amount of money that is needed. And, on the other hand, the trunk lines and C. F. A. lines would benefit, in my judgment, to a greater extent than the New England lines would.

"Third, there is danger to New England industry that must not be overlooked. I think it must be taken into consideration, because what Mr. Maxwell suggests really goes to the rebuilding of the entire rate structure of the Eastern territory; and that is going to consume a great deal of time. In fact, such a plan is already under way, in the shape of the ten-class scale, with which nearly all railroad men and, I think, the Commission are more or less familiar; and that adjustment, in my opinion, is the only way that we can accomplish a rate structure in Eastern territory that will be logical and will wipe out any discrimination or advantages or disadvantages that may now exist.

"Mr. Maxwell suggests that we put the Anderson scale in immediately, regardless. Now, as I see it, we cannot do that without we have the authority of the Commission, because we would create Fourth Section violations, and during the Federal control period the New England lines sought to do that very thing, believing that the

rates were in the control of the Government and that we could violate the Fourth Section under the conditions which then existed; but the Railroad Administration declined to permit that, and I do
1523 not see that there is, really, any justice in putting the full measure of the Anderson scale in until we can bring about some change in the Trunk Line rates, particularly those from Trunk Line points to the Hudson River gateways, and especially to New York City."

Asked what he thinks of Mr. Maxwell's suggestion in connection with the 7-2 cent differential not having been increased since prior to the Five Per Cent case, the witness said:

"It is true that by retaining the old arbitrary of 7-2 cents, the rate from Chicago, for instance, to Boston, does not stand the measure of increase that the rate from Chicago to New York does. On the other hand, we must not overlook the fact that the rates to Boston and Philadelphia have been increased in a greater measure than the rates to New York. If we are to apply the various increases that have been allowed to the arbitraries over New York which are made to Boston, there perhaps might be a good excuse for applying the same treatment to the arbitraries applied to Philadelphia and Baltimore, which are under New York, and in that way you would create a very wide spread as between Philadelphia and Baltimore, on the one hand, and New England, on the other.

"As I see it, the suggestion or the inference really means the discarding of all the rate relationships that have been recognized
1524 for many years in making the rates from the Eastern seaboard to percentage territory.

"I just want to call attention to Mr. Maxwell's Exhibit No. 180, where he shows that the rate from Boston to Pittsburgh, a distance of 654 miles, ranges from 99½ cents, first class, to 33½ cents, sixth class. That rate would be, under the C. F. A. scale, $1.26½ for that distance, and under the Anderson scale, $1.31½.

"Now, if we were to obtain as a rate from Boston to Pittsburgh $1.31½, the rates west of Buffalo and Pittsburgh would be affected in all of that territory, or substantially all of that territory, lying east of the C. H. & D. road, extending from Toledo south. In other words, you would not strike a rate of $1.31½ until you reached 83 per cent. territory.

"So that the full measure of the Anderson scale to Pittsburgh, if that is what the exhibit is intended for, means a rebuilding of the rate structure from the East into C. F. A. territory. Mr. Maxwell's suggestions involve really a revolution in the rate structure, and a revolution in the rate relations, so far as New England is concerned.

"But I do not mean to say that the rate structure ought not to be rebuilt. I do say this: that there is another side to this ques-
1525 tion, and one that particularly interests industry, and that we must, before we make up our minds as to what should be done to this rate structure, listen to industry—particularly New England industry. Mr. Maxwell's suggestions really involve as complicated and far-reaching an inquiry as that in which we are already

engaged, which might take the Commission as long or much longer to complete. I think there would be a great many hearings if we proposed any such adjustment. I do not know how long they would take."

The letter referred to above signed by Mr. Rich and Mr. Chandler, was received in evidence, marked "Complainants' Exhibit No. 202, Witness Eaton."

Asked with regard to the Boston & Maine terminal, whether it should be one cent or two cents on eastbound business, and whether he had made a computation to show whether, if it remains at one cent, the lines west get more than 40 per cent. increase, the witness said:

"I will illustrate it in this way: We will assume three roads, A, B and C, with a divisional arrangement which allows Road A 50 per cent., road B, 25 per cent., road C, 25 per cent., and, in addition, a terminal of one cent per 100 pounds, or 20 cents per ton, to be deducted before prorating and added to C's proportion.

"Assume now a rate of $2 on this basis of division that I have outlined. Road A would receive 90 cents, road B 45 cents, and road C, including the terminal of 20 cents, 65 cents. If the rate is increased
50 per cent., or to the extent of $1, making the rate $3, and
1526 no change is made in the terminal deduction, we would have this result: The terminal deduction being 20 cents, the same as before, there would be left as a prorate $2.80. Road A, receiving 50 per cent., would be allowed $1.40, which would reflect an increase of 55 per cent. Road B would receive 25 per cent., or 70 cents, or an increase of 55 per cent. Road C would receive 25 per cent., and, in addition, the terminal of 20 cents, or 90 cents, making an increase of 40 per cent.

"In other words, we have here a rate increase of 50 per cent. Road A receives 55 per cent., Road B receives 55 per cent., and Road C receives only 40 per cent.

"Now, if we take the same rate, $3, and apply the same measure of increase, namely, 50 per cent., to the terminal, we have a terminal deduction of 30 cents, instead of 20 cents, leaving a prorate of $2.70. Road A receives 50 per cent., or $1.35, equivalent to 50 per cent. increase in its revenue. Road B receives 25 per cent., or 67½ cents, equivalent to 50 per cent. increase in its revenue; and Road C receives 25 per cent., plus the terminal of 30 cents, or a total of 97½ cents, equivalent to 50 per cent. increase in its revenue.

"I think that illustrates our contention that when the terminal is
deducted before prorating it is in the rate and, therefore, any
1527 measure of increase applied to the rate, itself, must be applied to all parts that go to make up the rate. Certainly, the terminal, being in the rate, ought to carry the same increase as the rate itself."

Asked whether all his exhibits in reference to divisions are merely with respect to merchandise divisions, the witness said:

"As a general proposition, Mr. Examiner, the merchandise divisions apply not only to class rates, but to commodity rates, except as to coal and coke. There are a few exceptions."

No exhibits have been offered which show the divisions as to coal, although 14,004,000 tons of coal were interchanged out of the 34,000,000-odd tons of merchandise and coal.

Witness does not think that it is the case that the earnings suggest that the divisions afforded the New England carriers are greater on coal as compared to the earnings of the trunk lines than the earnings of the New England roads on coal traffic as compared with the earnings on merchandise traffic.

Recross-examination:

Asked whether, referring to the road-to-road per cent method, if the percentage of the New England lines were increased that would cause a change in the percentages of all the lines that participate in any way in that traffic, witness replied that all the lines outside of New England which participate in that traffic must take up in some way the increased revenue that is given to the New England lines. Asked whether he had any suggestion as to how that shrinkage should be adjusted, he replied that it might be done in two ways. After determining the amount of revenue that is due the New England lines, the balance might be prorated between the lines outside of New England on the present basis of divisions, using the present percents, or the balance might be divided between the roads outside New England on the basis of their road-to-road percents. Asked whether that would not require an entirely different separation of revenue on the New England Roads, different from the road-to-road percents on the other traffic, witness replied: "No. I think not. With your road-to-road percents you would have no different situation than you would have if you divided your balances under the present percents."

Witness' testimony with regard to road-to-road per cents.
1528 has made no provision as to how what is left should be divided or adjusted among the Trunk Lines and C. F. A. lines.

His testimony covers only the portion that he thinks should go to New England. He says that here is a method for divisions to apply on New England traffic and to determine only the portion which accrues in New England. By that method he arrives at this common percent, as he calls it. There is a factor which may be increased or decreased according as the Commission finds the needs of the New England Roads to be. What should be done with the balance he has not suggested. This percentage which he alludes to would be the percentage that would be for the entire New England portion, irrespective of whether it covered a movement over one or more roads and regardless of where the business went in New England and regardless of whether the traffic paid 15%.

After the percentage on road-to-road per cents. had been adopted, it would then in some instances be to the interest of the road to get rid of the traffic as quickly as it can. In others it would not be to

its interest to do so. It would get the same percentage irrespective of distance that the traffic was hauled, if you applied the road-to-road per cent. plan in subdividing the revenue that is left after New England takes its proportion. It might be of advantage to some of the roads to get rid of their traffic at short haul points, and there might be instances where it is to their advantage to take the long hauls. Witness does not think that the road-to-road per cent. plan is going to influence to any great extent the movement of traffic through short haul junctions. The reverse influences the movement of traffic today where the road wants to get a long haul.

If this plan is confined to New England, witness does not think, so far as New England is concerned, that it would have to be re-checked, because he cannot see that New England traffic is going to change in character sufficiently to warrant a re-check, nor can there be diversion from one group to another; but, with the lines west, witness can see where the diversion from one line to another
1529 might affect the traffic, and for that reason it might be well to have this re-check, say, once in three years, 5 years, or something of that kind.

It is not witness' idea that this plan would carry a road-to-road division as between the New England lines themselves.

When it comes to dividing this money within New England, there must be some agreement arrived at as between the individual New England roads. Witness' plan is merely a simplification of what we have today, but going a little further and combining the New England revenues as a whole. As among the New England roads themselves, there would be no road-to-road per cents, but it would be a matter for adjustment among the roads.

Mr. Hobbs said there is so much money needed that it will take 15 per cent. to do it, and witness made up the plan.

Witness recognizes that the rate to New York carries over into New England a greater distance than it carries to New York. On the other hand, it is necessary to take into consideration the industrial features that involve this rate structure.

Witness' plan in regard to the road-to-road per cents. practically means a pooling of the amount to be divided.

Witness thinks that the Boston & Albany is a New England line, and ought to go into the pot with the rest. The Boston &
1530 Albany is not one of the complainants in this case, so it was left out of this exhibit. Witness does not know how that inclusion would affect the final figures.

The Canadian Pacific in New England is not much of a factor. They have an exceedingly small mileage. Witness should say, as to the Grand Trunk, that they ought to be included.

WILLIAM HENRY WILLIAMS, heretofore called on behalf of the defendants, was recalled and testified further:

Redirect examination:

Asked if he had some additional exhibits that were asked for by the other side, the witness replied:

"I have three. The first is the population of New England in connection with the census of 1920. I found I was able to get that. After that was prepared, my attention was called to the fact that in both of the exhibits,—I mean in the first exhibit, as well as in this—the State of Vermont was omitted. The State of Vermont has a smaller population than New Hampshire. Just a minute. I can give that, I think. (After consulting papers:) It had 355,956 people in 1910, and 352,428 in 1920, none of which came within the 50-mile limit of tide.

"I state that so as to make it complete as to New England;
1531 but Vermont is excluded in the total figures.

"I understood Mr. Pearson, from his testimony, to feel that there was a material change. It will be noted, comparing with my Exhibit No. 130, which showed the census of 1910, that the percentage of people living within 25 miles of the coast line is identical in 1920 and 1910; and, of those living within 50 miles of the coast line in 1920, there were 73.29 per cent., and in 1910, 73.04 per cent."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 203, Witness Williams.

The Witness continued:

"There was a letter of May 9th from Mr. E. J. Pearson, President of the New Haven road, forwarded to various members of the Eastern Presidents' Conference, which I read at the time I was previously on the stand, but which it was stated the reporter need not take down, the understanding being that the letter would be introduced as an exhibit; and I offer that letter now as an exhibit."

The letter referred to was received in evidence and marked Defendants' Exhibit 204, Witness Williams.

The witness continued:

"Then, when I was on the stand, I was asked, in connection with my Exhibit No. 134, I believe, showing the number of manufacturing establishments in New England, as to whether it
1531*a* was possible to secure information which would show the capital invested, in the same comparative form; and I have been able to obtain that from the 1910 census. The information has not been collected by the Census Bureau in connection with 1920 census. I offer that as an exhibit."

The statement referred to was received in evidence and marked Defendants' Exhibit No. 205, Witness Williams.

The witness continued:

"When on the stand, speaking off the book, I stated that at the anthracite mines from 12 to 18 per cent. of the coal was condemned. On checking that up, I find that it is from 10 to 12 per cent. I wanted to make that correction in the record. Of the number of cars which are loaded at a breaker, from 10 to 12 per cent. are condemned by the inspectors of the coal companies.

"Of the total numbers of cars loaded, approximately 4 per cent. are placed back in the empty yard, dropped by the breaker, unloaded, and pass through the breaker again for re-preparation. Some of the others are condemned as to the tonnage, and some are condemned in preparation, which is adjusted—either the coal sold as a different size, or some other provision made, which permits of its going to market. But there is a delay there until it has been handled by the inspectors."

1532 Asked what transfer facilities were maintained at Mechanicsville for less than carload freight, the witness said:

"At Mechanicsville there is a transfer station, as I recall, of the Boston & Maine and the Delaware & Hudson Company. Both handle transfer of less than carload traffic at Mechanicsville; the Delaware & Hudson operating the station in connection with the westbound traffic. I assume that the Boston & Maine would handle it only as to the eastbound traffic.

"I should like to say, in connection with that transfer of less than carload freight, that Mr. Pearson intimated that we were trying to transfer that traffic as many times en route as possible. Using my illustration, you will recall that I made the statement that in the first instance the traffic would be transferred at Mechanicsville. It is entirely a question of tonnage as to where the traffic goes from one transfer station—as to the destination of the tonnage loaded at a transfer station. You endeavor to load that as far as it is possible to load it and get a full car. If it is within 50 or 100 miles of the point of loading, you usually make a way car. If it goes beyond that, you may load a car that breaks bulk at a station, and after they take out of the car the traffic for the particular station, the way freight crew takes it along and peddles it out at other
1533 stations. But, if it is going any considerable distance, it may go through two or more transfer stations. It just depends on the volume of traffic at each loading station as to whether you can place in a car sufficient tonnage to warrant sending that car through to any given destination; and it is not an unusual thing for less than carload traffic moving, say, 400 miles to be transferred two to four times en route.

"I had charge of the loading stations, of all stations on the B. & O. and on the Frisco, and was thoroughly familiar with their loading schedules at the time; and that is one of the unfortunate things which attaches itself to less than carload traffic."

Asked whether he wished to comment on Mr. Miller's testimony concerning Exhibit No. 141, the witness said:

"The embargoes, presumably, are issued because there is too much traffic for one point or one consignee, or because there is too much traffic for one road to handle. The situation as to New England is different, generally speaking, than that of the rest of the country when it comes to embargoes. West of New England, if one line is in difficulty, or one gateway, it is usually possible to forward your traffic through over other lines or through other gateways.

Generally speaking, the situation in New England is not
1534 materially different on the three east and west lines—that is, the New Haven, the Boston & Maine and the Boston & Albany;—except that the Boston & Albany is usually freer in taking traffic than is the Boston & Maine.

"I have been interested in the coal trade in connection with the Delaware & Hudson mines for 13 years, and in all of that period, with the exception of only one year, we have had difficulty in getting our coal on to the Boston & Maine Railroad, and up to the time of the war we preferred not to sell any coal going to the New Haven, unless the connecting lines would furnish the cars, because it took so long for the cars to make the round trip that it tied up our mines. The cars did not come back in sufficient time to keep the mines running full, and the loss from the operation of the mines partial time was so great that we could not afford to stand it."

Asked whether, during the summer of 1920, witness made a special effort to get the coal into New England promptly, in order to get it out of the way of other equipment, the witness said:

"It goes back of that period. As early as 1908, we made special arrangements urging the wholesale dealers handling the traffic on the Boston & Maine to make special provision so as to get the coal to move into Boston & Maine points in the summer months.
1535 That is one of the few places where the volume of traffic all-rail moving during the summer months is in excess of the volume of traffic moving all-rail through the winter months. As to anthracite coal, it was necessary for them to finance the dealers to some extent, in order to get them to handle it in that way. But that action was forced upon us, in order to secure the volume of that business which we were desirous of obtaining.

"I did have some correspondence in May, 1920, pointing out the dangers to New England if the action with reference to embargoes on coal during the summer months was not to be withdrawn and permit of the coal going forward to meet their winter necessities, and having particularly in mind the experience of 13 years and the inability of the Boston & Maine to handle its monthly pro rata of the traffic during winter months; and I would offer as an exhibit a copy of my letter as senior Vice-President of the Hudson Coal Company, addressed to Mr. Hustis, Vice-President of the Boston & Maine, under date of May 10, 1920; his reply to me of May 14, 1920; my letter to him of May 26, 1920, and his reply to me of May 29, 1920, clearly setting forth the difficulties we were having in connection with the handling of coal traffic."

The paper referred to was received in evidence and marked
1536 defendants' Exhibit 206, Witness Williams.

The witness continued:

"I would say, as to that, that the situation this year was abnormal. This is practically the first year that we have had serious trouble during summer months, and I only mention it because I feel that

it is abnormal, and that any abnormal results brought into the record ought to be given due consideration."

Asked whether that correspondence shows the number of days during which they were unable to put coal out of Mechanicsville for Boston & Maine points, the witness said:

"There were 47 days during which we were unable to load coal for Boston & Maine points. I believe the superintendent of transportation roughly estimated it, from our exhibit, to be 45 days, but there were 47 days between May 1st and the 1st of September, 1920, when we could not do it. As I say, that is an abnormal result. While we have always experienced trouble in the winter, this is the first time we have had serious trouble in the summer."

The witness continued:

"I should like to say, in connection with this last exhibit, No. 206, that the correspondence shows to some extent an adverse situation on the Boston & Maine, as a result of the outlaw railroad strike and, presumably, some diversion of traffic from the southern
1537 roads to the northern roads, which were not so seriously affected by that strike.

"In the testimony some statements have been made as to the relative wages paid in New England in former years, as against those paid on other lines, while today they are all working on a relatively uniform scale. I came in touch with that situation when doing special work for the General Managers' Association of New York, as I stated when I qualified as a witness, and subsequently have taken the matter up with Mr. Whiter and Mr. Walber and Mr. Duncan, who have handled the matter for the railroads.

"By reference to the Commission's report of 1910, Statistics of Railways in the United States, page 39, we find a comparison of what are known as Group 1 roads with Group 2 roads; the Group 1 roads representing the New England lines and, apparently, a very short piece of the New York Central, and the Group 2 roads are the lines immediately west of there. The report goes into considerable detail to show the names of the individual lines; but it is interesting to see the comparison at as early a date as 1900. The general officers—I will give Group 1 and Group 2 in column form. The first will be Group 1, and the second Group 2.

	Group 1.	Group 2.
1538 General Officers	$10.70	.....

This is the average daily compensation in dollars.

Group 2	.....	$11.25
Other officers	5.80	6.66
General office clerks	2.08	2.30
Station agents	1.80	1.68
Other station men	1.79	1.64
Engine men	3.48	3.62
Firemen	1.97	2.05
Conductors	2.97	2.97
Other trainmen	1.94	1.90
Machinists	2.29	2.19
Carpenters	2.06	2.04
Other shopmen	1.86	1.64
Section foremen	2.03	1.66
Other trackmen	1.44	1.19
Switch tenders, crossing tenders and watchmen	1.48	1.59
Telegraph operators and dispatchers	1.84	2.01
Employes, account floating equipment	1.71	2.01
All other employes and laborers	1.66	1.56

This report does not give the average daily compensation for all the employees nor the average daily compensation excluding general officers. Witness believes that could be worked out from other tables in the report.

Witness continued:

1539 "Now, the only place where New England seems to have had a lower scale was general officers, other officers, general office clerks, enginemen, firemen, switch tenders, crossing tenders and watchmen, telegraph operators, and dispatchers, and employes account floating equipment. As to all the other classes, with the exception of conductors, which was identical, the pay in the case of the Group 2 lines was less than the pay in the case of the Group 1 lines.

"In 1907, when I came to the Delaware & Hudson, their rates were below the rates, for instance, of the Pennsylvania, which was known as a standard line, and we adjusted them in 1908. In the last two years a decision was handed down growing out of an appeal made by all the lines that had less than what is known as the standard scale, and in going over the record in that case at the Bureau of Railway Economics it indicates that the wages were less on these larger systems west of New England than in the Eastern Rate Group.

"Cincinnati, Hamilton & Dayton, Wheeling & Lake Erie, Coal & Coke, Cincinnati Northern, Chicago, Terre Haute & Southeastern, Chicago, Indianapolis & Louisville, Cleveland, Cincinnati, Chicago & St. Louis, Lake Erie, Alliance & Wheeling, Lake Erie & Western,

Kanawha & Michigan, New York, Susquehanna & Western, Pere Marquette, Toledo, St. Louis & Western, Wheeling & Lake Erie, Zanesville & Western; those roads being included in the
1540 presentation of the case.

"As to the pay of the enginemen and firemen, it should not be overlooked that the statistics of the Commission include the pay for both passenger enginemen and firemen and trainmen and conductors, as well as freight enginemen, firemen, conductors and trainmen.

"Now, the pay in passenger service is less than it is in freight service. That would in a large measure, if not entirely, account for the relatively slight difference in the average rates of pay in 1900. Furthermore, the pay of enginemen and firemen has for many years varied with the size of the locomotive, and with the larger locomotives in use west of New England that would also account for any slight difference in the average rate of pay as to those two classes.

"In the data which I prepared for the General Managers' Association, a very voluminous book, it was indicated that the pay in train service on the New Haven was greater than the pay for similar runs on the lines of west of New England. The pay of the men in engine service was not comparable, because they had thrown it on a weight basis, instead of on the basis of the size of the cylinder; so that the figures are not quite on the same basis. That was the only way in which we could get the information from the New Haven
1541 at the time, apparently their agreements being based on the weight of the engine, rather than on the size of the cylinder.

"In connection with Mr. Pearson's statement that the revenue of the New Haven system's local freight approximates 330 per cent. of the average operating cost, intra-New England 240 per cent., and the inter-Trunk Line only 82 per cent., I wish to emphasize my previous testimony as to the failure to bring in the variable factors.

"First is the class of traffic. The fluctuations as between the first six classes only are very considerable. Taking the present rates, for example, from Boston to New York City, as shown in Mr. Maxwell's Exhibit 179, the first class rate being 74 cents, second 66½ cents, third 55½, fourth 42, fifth 30½ and sixth 24½, it will readily be seen that in working out the revenue per ton mile the class of traffic that is handled is quite an important factor, and any comparisons that are made on ton miles ought to be on the basis of the same classes of traffic.

"Then comes the question of distance. The rate per ton mile decreases as the distance increases, until it gets to the irreducible minimum, whatever that might be. So that it is essential in making comparisons between the local traffic, the local inter-line in New
1542 England, and the interline traffic interchanged with trunk lines and Canadian lines, that they should give some data showing the average distance hauled.

"Now, in order to ascertain the average earnings per ton mile which they have introduced in this case, it was necessary for them to ascertain the aggregate tons handled and the aggregate tons moved one mile for each of the three classes of traffic. Therefore, it would

have been relatively easy to have divided the tons into the ton miles and ascertained the distance each of those three classes of traffic is handled, and that would throw considerable light onto these figures which are used in making these comparisons.

"Then, as to the less than carload traffic, the volume originating on the New Haven being so exceptional and the volume handled on the New Haven in proportion to its total traffic being so exceptional as compared with the country, it seems quite important that there should be some analysis showing how much of that is local, how much of it local inter-line and how much of it is traffic interchanged with the lines outside New England.

"I have not quite the fear some have as to the question of analyzing the cost of the service. In so far as dividing up the freight traffic expense is concerned, we must first divide the expense between passenger and freight service. I stated the other day that
1543 my belief is that the capacity of your line is dependent upon trains, in the first instance. A train is an engine, with or without cars, and carrying signals. Now, those trains must be spaced on the road, and if you have a single track you have got to give way for an opposing train, clear the track 10 minutes if it is a passenger train, and 5 minutes if it is a freight; and, then, you are not permitted to run those trains too close together. So that the capacity of your line is first determined by the number of trains.

"Now, if you operate them at a uniform speed you get the maximum number of trains over a line. As I said the other day, that is why during the war in France all passenger and freight trains moved at one uniform speed. When you bring the varying speeds into play, you reduce the capacity of the line as to the number of trains that can be moved.

"Now, the next determining factor in the capacity of your line, of course, is your grade, and then comes the question of the capacity of your locomotive. After that comes the capacity and the average loading of your cars.

"On the lines in the West, where I have operated, we have had in effect an adjusted tonnage rating, going back to the Pennsylvania in the late 90's and on other roads in the early part of this century. Prior to that time, while the operating men knew that an
1544 engine would not haul the same number of gross tons regardless of the number of cars in the train, they had never worked it out to determine the exact effect, and the practice then was to treat two empty cars as a load. But when it came to the loaded cars, they had never worked out a suitable basis for equating the difference in the average tons per car; and the importance of that developed very rapidly after about 1895 or 1896, when the big car began to come into use. Prior to 1896, the average capacity of what you might consider the car of the time was about 40,000 pounds. Today a modern coal car has an average capacity of 100,000 pounds, or over.

"Now, as we bought in the larger car, the importance of the difference in the tonnage carried and the number of cars that were carry-

ing the tonnage, and its effect on the train load, became more and more marked and necessitated giving it closer attention.

"So we experimented with cars of various capacities and cars with varying tonnage loading, and then had dynamometer tests made, with the result that we ultimately got down where we found that for the .3 per cent. grade line that adjusted tonnage was about 15 tons. Now, for a 2 per cent. grade line it is 3 tons; for a 1 per cent. grade line it is 5 tons, and for a .5 per cent grade line it is 10 tons.

1545 "Mr. Pearson, in commenting on my illustration of a .3 per cent. grade line, stated that there are relatively few lines with those grades, and that my illustration accentuated the effect of the grading in the tonnage loading.

"I have, therefore, taken an engine that can haul 4,000 tons over a .3 per cent. grade line, an engine that can haul 4,000 tons over a .5 per cent. grade line, and an engine that can haul 4,000 tons over a 1 per cent. grade line. Those would have to be three entirely different engines. I am eliminating the effect of the grade, simply to show the effect of putting your tonnage into an increased number of cars.

"In each case I have taken the deadweight of the car as 21 tons. The average paying load of cars in New England for the first nine months of 1910 was 24.2 tons, and for other roads in the Eastern Rate Group it was 32.9 tons. An engine that could haul 4,000 adjusted tons over a .3 per cent. grade line could haul 1,911 tons, paying load, in cars having an average loading of 32.9 tons, and 1,607 tons in cars having an average loading of 22.2 tons. An engine that could haul 4,000 adjusted tons over a .5 per cent. grade line could haul 2,060 tons of paying load in cars having 32.9 tons average loading, and 1,754 tons in cars having an average load of 24.2 tons. An engine that could haul 4,000 adjusted tons over a 1 per cent. grade line could haul 2,234 tons, paying load, in cars
1546 with an average load of 32.9 tons, and could haul 1,928 tons of paying load in cars having an average load of 24.2 tons.

"Stated in an other way, the percentage of the revenue tonnage—that is, of paying load—in a train with cars having 24.2 tons revenue freight, to the revenue tonnage in a train with cars having 32.9 tons each of revenue freight, would be 84.2 per cent for a .3 per cent grade, 85.2 per cent for a .5 per cent grade, and 86.3 per cent for a 1 per cent grade.

"Now, that does not make any material difference in so far as my statement, for purposes of illustration, is concerned; the fluctuation being relatively slight.

"Now, to handle the increased tonnage due to the lighter loading of cars necessitates an increase in the number of cars, an increase in the number of trains, an increase in the number of locomotives, in the number of crews, in the amount of fuel and other train supplies, an increase in yard facilities and, possibly, an increase in main track facilities—all of which requires additional investment or additional operating expense, and without in the slightest degree increasing the operating revenue to the carrier.

"Therefore, it is important to know, on the traffic that originates in New England and local to New England and the traffic
1547 which they interchange with their connections outside New England, as to whether the local traffic has a less loading per car. If it has, it very materially adds to the cost of performing the service.

"As to New England having no points originating a great volume of traffic, while that may be correct, except as to slate or granite, the New England lines do get from their connections a very great volume of traffic, as indicated by the exhibit which was put in by the Superintendent of Transportation of the Boston & Maine of the tonnage that they get at Mechaniesville.

"Now, he indicated that 80 per cent of that tonnage moves through to South Deerfield in solid trains, or can move in solid trains; that 80 per cent of that which goes into South Deedfield can move into Ayer, and 30 per cent of that which goes into South Deerfield can move into Boston.

"Mr. Brigham in his exhibit with reference to the tonnage admitted that there was a duplication, and when I took the net tons that were handled, without duplication, and divided it into the tons moved one mile, I obtained an average distance that all freight moves within New England of 163 miles.

"I am only bringing that out because of the point that is in my mind—that it does not indicate a short terminal service. 163 miles does give a substantial road movement; and it certainly does
1548 not come within the Commission's classification of terminal and switching lines. And the illustration made or the exhibit introduced by the Superintendent of Transportation of the Boston & Maine indicates that a very substantial part of its traffic—80 per cent of what we give them at Mechaniesville—goes 100 miles. As to some of the balance, of the 20 per cent which is cut off, some of it is going over to other lines, and to that extent they have overhead traffic. To the extent of the tonnage going into Ayer, which is 60 per cent of the traffic delivered to them at Mechaniesville, to the extent that that goes to other lines they have overhead traffic. And the difference between the actual tons which are handled and the total tons which are handled, including duplication, is so marked as to indicate that if all the facts are developed the New England lines must have a substantial overhead traffic of their own.

"It was for that purpose I was attracting attention to the average distance hauled of 163 miles in New England.

"Now, as to the percentage of the tonnage rating which you get back of the engine, and which Mr. Cunningham says he introduced during the period of the United States Railroad Administration or, at least, he was connected with the Administration in the use of those figures: I was familiar with that system over 13 years
1549 ago. I do not know its origin, but am under the impression that it originated on the Great Northern Railroad. We have it in use on the Kansas City Southern, of which road I am a director, and it has been in use on other lines. Even though the Interstate Commerce Commission should discontinue the statistics,

we would continue to prepare them ourselves, for economic operation of our line.

"The figures are not conclusive, when prepared in just the way that the Railroad Administration prepared them. We divide our traffic into quick dispatch and slow or continuous movement traffic. We divide it by directions, and we divide it as between main line and branch line traffic. Now, unless you give consideration to the effect which those variable factors would have in these results, you do not get the full effect; but, after all, the figure as shown does indicate in a general way what you are able to secure under all conditions that control the loading of your locomotive. But, in so far as operation on an individual property is concerned, to enable you to follow it through closely, you would have to make the separation I spoke of.

"Now, the New England lines get a better movement in each direction, apparently, than do the lines west of New England; my exhibit showing a little better percentage of loads to the
1550 total number of cars handled, and that would in a measure account for their getting a little better percentage of tonnage back of the engine. But, whatever the factors are, whether it be the tonnage by directions, by branch lines, or whatever the factors are, it does show that they are getting a little better tonnage back of their engines than we.

"Now, as to the size of locomotive, clearly with the volume of the traffic that is moving east of Mechanicsville, with 80 per cent. moving to Deerfield, with 80 per cent. of the Deerfield tonnage moving to Ayer, there is no good reason why as large a locomotive cannot economically be used there as can be used west of New England for similar grades.

"They are only coming to the use of the large locomotive. As I understood the testimony of Mr. Cunningham, he referred to the changes they had to make in their bridges. He was not sure whether they had completed the work or whether they could go on installing the larger locomotive. West of New England we have been busy for some years in changing our roadbed and strengthening our bridges so that we could put in heavier power and get the economies which come from that power.

"Now, as to their ability to finance needed improvements of that kind, clearly if the New Haven had taken the money which
1551 it has expended for trolley lines, being in excess of $100,000,000, the money which they have expended in other directions, such as their guaranty of the Westchester line, involving the guarantee of interest in excess of $800,000, and other money of that kind, and had utilized that same credit for their common carrier property as a steam railroad, they would be in better shape.

"When it comes to the Boston & Maine, they lease a number of lines. They have just been in the hands of the court. They had their election, when they were in the hands of the court, as to whether in reorganizing that line they would cut off such lines as were not satisfactory earners or whether they would elect to keep them, and they elected to keep them. Now, if those lines are a hard-

ship in so far as this interchange traffic is concerned, clearly, if we are to be charged for the cost of supporting them, we should have had some voice as to whether they were to keep them or not. And, if they had eliminated some of the poorer earning lines, these low earning branch lines, which they say cannot use modern power—if they had eliminated them in their reorganization, as some of the other lines have done, it would have made their traffic more remunerative at this time.

"Now, as to the average mileage of locomotives, Mr. Pear-
1552 son testifying on pages 2531 and 2532, and Mr. Cunningham, I think, today, I did not use that figure, although it was on one of my exhibits. I made no comment upon it in my testimony. It is dependent upon the number of engines in work stock and the volume of traffic that is moving. If, for example, you had 15 locomotives withdrawn from service and not written out of your accounts, those engines would be used in figuring out the average mileage of your locomotives; or, if you had 15 engines that were laid up—I mean, if you are not running your engines full and you are taking them first in and first out, but there is considerable loss of time at the terminals by reason of the volume of traffic not needing all the engines to be used, it will pull down the average miles per locomotive. All roads must have engines to move the maximum traffic, or as near the maximum traffic as they can afford to have. So that that mileage figure is quite a variable factor.

"Mr. Pearson commented on the Trunk Lines, at page 2535, requiring the New Haven to furnish some of the New Haven's cars used in loading company fuel. I had assumed from the other testimony, to the effect that they were having difficulty in getting cars off their lines, that that would be to their advantage and some credit would be given us.

"Now, the situation as to the owner of a car in times of
1553 business depression is no different in New England than outside New England. When you are paying a dollar a day for a car, whether you have any need for it or not, you are going to get it home as quickly as possible, whether it is owned in New England or whether it is owned in Trunk Line, C. F. A. territory, or some place else. So, that works no greater hardship on the owner if located in New England than if located some place else. You purchase enough cars to handle the business of your line. Now, with the falling off of the business there is not enough loading so that you can keep those cars off your line, any more than there is an ability on the part of the New England lines to keep the cars off their lines.

"Then, if there was any relation between the per diem and the average distance that a car moves per day, I am at a loss to understand what would happen in a case like that of the New York, Susquehanna & Western, making an average mileage of 4.6 miles per car per day. The purpose of per diem is to recompense the owner for the use of his car, and also to keep that car moving; and in time of stress in former years we did have what was known as a penalty.

The owner could call upon the person having the car in his possession to return that car promptly; otherwise you would add a penalty over and above the per diem, in order to force the car to
1554 move. I recall when this subject of per diem was up in the American Railway Association, and the situation which confronted us then was the fact that our cars got down into New England and did not get out, and the owner of the car was not getting the use of the car and was not getting paid for the car.

"Now, Mr. Pearson commented on the very big improvement which the New Haven has made in the last two years in the handling of embargoes and the effect that has had on their car situation. I think Mr. Pearson recognizes the necessity of protecting that situation as much as anyone; but in former years they did not use it, and it was their failure to recognize it and the unfair use which the cars got on the New England lines that was really responsible for the adoption of per diem.

"One of the witness testified today to the clock arrangement they had on the Boston & Maine, I believe, for showing the improvement, and so forth, and I think they also testified to the fact that they had gotten up to 19 miles per car per day. All that I have suggested as to the New Haven was that the New Haven simply equal its former efforts in the handling of cars. I did not set up a theoretical performance, and if they make the same movement that they made in 1919, it will make a difference of $5,000,000 per year in
1555 per diem.

"Now, that is a matter in their hands. It is not a matter in the hands of the roads west of New England; and if they fail to save the $5,000,000 of per diem it should certainly be charged to them and not to us.

"Now, the Boston & Maine has not equaled the Boston & Albany in the past. It may be that they cannot quite approach these figures, but if they will equal anything like the performance that they have been making in the last two or three months, it will very materially reduce their per diem.

"And, on the other hand, the Boston & Maine, as I testified before, have reduced the number of cars something like 5,000 or 6,000. Of course, if they do not keep up their equipment, they are going to add very materially to their per diem cost; and I can well see how everybody will cease owning cars if the paying of the per diem permits you to increase your divisions, but I am quite at a loss to understand who is going to furnish the cars, because if you take it out of the divisions of the through rate—any sum of money—in order to pay any part of per diem, when under the present rate all it does is to recompense the owner for his expenditures for repairs, depreciation and 6 per cent on his money, you are not going to have
1556 anybody that will be willing to build any new cars. And, if I could get my cars on that kind of basis, I would certainly be perfectly willing to let any equipment I have today go on the scrap heap, because I would be money ahead.

"Now, as to the difference between the mileage rate and per diem, consideration must be given to the very heavy increase in car repairs.

Some 8 to 10 years ago we figured on repairs to freight cars costing $40 to $60 per year.

"In my Exhibit 142, showing the result of the consideration of per diem by the Railroad Executives, it shows an average cost per car of $227.21 for maintenance, $36.38 for depreciation, $8.08 for taxes and $64.01 for interest at 6 per cent. Now, just let us take out the interest for a moment, and you have $271.67 as out of pocket cost in the way of maintenance, depreciation and taxes; and I can not see where the owner is going to break even with any hocus pocus that takes money away from him through a change in divisions.

"Now, Mr. Cunningham commented on my testimony with reference to passenger and freight service. I did not undertake to say that passenger service or freight service, either one, was paying its way in New England. I do feel, however, that the passenger service in New England should pay its fair proportion of the operating cost, as well as its fair proportion of the investment necessary to
1557 handle the traffic; and when you bear in mind the difference in the capacity of your line, bear in mind that the capacity of your line is first measured by trains, I think that as to the investment we could well divide the investment on the basis of trains. As to operating costs, I would not do it. As to the separation of costs as between less carloads and as between commodities, it is possible to ascertain the average tonnage that is handled in the cars that are moving over the road for each kind of commodity, and whether it is carload or less than carload. Having ascertained the average tonnage per car, it is then possible to ascertain the quantity of paying load of each of those classes of traffic, whether it is carload, less than carload, or first class, second class, and so on, which can be handled by any given engine; and from that you can ascertain what your train earnings would be if it moved in solid train lots.

"Now, it makes no difference whether the coal moves over the Boston & Maine in train lots or whether it moves over the road in connection with something else. It requires for a given number of cars the same tractive power effort, whether it moves in solid trains or whether it moves in trains with other freight. So that that basis of dividing the cost would be fairly correct. It would certainly be as correct as any division between passenger and freight.

1558 "When it comes to the coal business, while it is true that the earnings per train mile might show approximately the same as the earnings per train mile on other classes of freight—it does not as to all—you then find that, except for a very few exceptions, you have no return loading for your coal car. Now, that situation is the same as to New England; it is the same as to their connections. So, if you give consideration to the cost of taking these empty cars back to the mines, as against traffic moving in box cars, where the box car is loaded to a greater extent on the westbound movement, you will find that the box car traffic will be better paying than the coal traffic, taking the movement of the engines and cars in the two directions and the tonnage that can be handled.

"Now, as to the switching, my use of the yard and train switching mileage: Mr. Cunningham testified that the cars handled was the

controlling factor in the yard, rather than the relation of the yard locomotives to the road locomotives. I am very glad he has gone that far. I think I could meet him on common ground. I was objecting to their use of ton miles, and used this as the only information which was available—they having not put in the record any information indicating the number of cars passing through the different yards and the cost of handling those cars. And it
1559 is of particular importance in giving consideration to the large volume of l. c. l. traffic which the New England lines handled and which he said had a relatively light loading per car, because it costs just as much to handle that car through the yard, as nearly as it is possible to estimate it, as it does a car of coal or other freight. To some extent the tons have a slight effect, but it is so slight as to be ignored generally in operation.

"Now, as to the adjusted tonnage, I have answered the comments of Mr. Pearson. Mr. Cunningham testified that no road in New England uses adjusted tonnage. Prior to our use of it west of New England—and, as I have said, we have used it over 15 years—we did not get as good economical results as we have since we introduced the practice of adjusted tonnage. You cannot estimate it today, I am satisfied, with the varying capacity of your cars and of the loading.

"Some reference was made by Mr. Cunningham to the inference that I thought might be drawn that there was some inefficiency in the operation of the New England lines. I do not recall any testimony to that effect; certainly it was not my intent in bringing out the exhibits that I did. I should want to feel entirely in touch with the operating conditions before I discussed the question of efficiency.

1560 "What I did undertake to do was to put in some exhibits which would indicate the likelihood that there was a considerable difference between plant facility in New England and plant facility outside of New England, and that by bringing their plant facility into harmony with ours they would probably bring their cost more nearly into harmony with ours."

JOHN W. MEREDITH, called as a witness on behalf of the defendants, testified:

Direct examination:

That he is General Superintendent, Central Railroad of New Jersey. He came to the Jersey Central in 1885 as a clerk, and was then agent, telegraph operator, train dispatcher, train master, superintendent, and has been general superintendent since that date.

Witness has undertaken to prepare a comparison of the operating statistics and other statistics that he thinks are significant in contrasting the relative costs of the Jersey Central, the New Haven, the Boston & Maine and the New England roads as a group.

The statement above referred to was received in evidence and marked Defendants' Exhibit 207, Witness Meredith.

The year reflected by this set of statistics is the year 1919,
1561 except as noted in the margin. The statistics of the New Haven, the Boston & Maine and the New England roads are, for the most part, simply an assembly of statistics taken from other exhibits that are already in the case, or from the annual reports of the carriers to the Interstate Commerce Commission.

Asked to summarize what the exhibit indicates to his mind, the witness said:

"The exhibit strikingly emphasizes that, as compared with either the New Haven or the Boston & Maine or the New England roads as a group, the Central Railroad of New Jersey has:

"(1) Much the shortest average haul;

"(2) A slower train speed per hour, owing, among other things, to greater density and heavier grades;

"(3) A much larger percentage of empty car miles;

"(4) A much larger percentage of yard switching to total locomotive miles;

"(5) Much heavier taxes in relation to gross revenue or miles of road operated;

"(6) Substantially larger investment per mile;

"(7) A larger percentage of cars owned in relation to volume of traffic;

"(8) Much smaller revenue from demurrage in proportion
1562 to tonnage;

"(9) Notwithstanding the alleged per diem handicap of the New England roads, we have as small a number of car miles per day as the New Haven, and a substantially smaller number than the Boston & Maine or the New England roads generally;

"(10) Our freight stations are closer together than those of the New Haven or the Boston & Maine, although, probably, owing to their passenger traffic or local freight service, our agency stations are relatively fewer than theirs.

"The point stressed by the New England roads throughout the proceeding is that New England is a big yard, and the New England roads, especially the New Haven and the Boston & Maine, are merely terminal carriers. For these reasons, the New England roads have contended that, owing to the great increase in terminal costs during the past 10 or 15 years, they have been more prejudiced by increased costs than the defendants generally.

"This argument overlooks the fact that trunk line territory is a terminal territory, as well as New England. If there is any force in the argument of the New England roads, then it applies more strikingly in favor of the Central Railroad of New Jersey than in favor of the New Haven or the Boston & Maine, because the Jersey

Central has the characteristics of a terminal road to a greater
1563 extent than they do.

"Notwithstanding this fact, the items on the exhibit, under the heading 'General Results,' show that the Jersey Central does not get as high a revenue per ton per mile as the New Haven; it receives only a little more than one-half the revenue per ton of the New Haven; it receives only three-fourths of the revenue per loaded car of the New Haven, and, finally, its operating ratio during the past year has been just as abnormal and has shown the same trend during the past three months as has the New Haven's.

"Perhaps the most striking fact of all is that, although the Jersey Central has for a generation been recognized as one of the prosperous trunk lines, instead of showing some return on its property investment, it showed for the first 10 months of 1920 a deficit of 3.21 per cent., whereas the New Haven showed a deficit of only 2.49 per cent., the Boston & Maine a deficit of only 3.64 per cent., and the 7 New England roads a deficit of 3.10 per cent."

The witness has current information showing the trend of daily receipts of the Jersey Central since September. The normal receipts of the Jersey Central are about $226,000 per day. In September they were $223,000. These are the daily averages. That was a drop of $3,000 daily. In October they dropped to $207,000; November, to $180,000; December, to $162,000; and in Janu-
1564 ary, to $140,000. These facts result in borrowing money to pay the bills.

The operating department of the Jersey Central, which includes the maintenance of way department, began reducing expenses in about September, when they first felt the downward trend materially. The report witness had about 10 days ago showed that as compared with the high price period, high prices due to the number of men employed and the number of hours employed, and factors of that kind, as well as engine hours, as compared with that period, they were operating about the middle of January on an annual basis of $4,000,000 less than they were at the peak period. That reduction applies to maintenance of way men, section laborers, extra gangs, work trains and mechanical forces. It applies to yard engines and yard employes and to stations and station employes and similar expenses. It does not take in the reduction of expenses on account of reduced train service, because they fall largely with the flow of traffic.

Practically all the Central New Jersey traffic is operated in pull or fill-out service. In other words, they do not call a crew unless they have a train for it. That applies to the operating and maintenance of way men only.

Just before witness came down here they arranged for a
1565 further reduction of about 15 to 20 per cent. in the number of section men and the putting of at least 80 per cent. of them on a 5-day week, as well as the roadway mechanics on a 5-day week. This will result in an operating way to a saving of a good deal over $4,000,000 a year.

So far as the details of the other departments are concerned, wit-

ness cannot speak so positively, but last week the mechanical department forces were cut 15 per cent. and, in addition, put on a 5-day week basis. Witness does not have any figures showing what that saving will be in dollars and cents, but it will be large. While they have these reduced forces it will be entirely impossible to give the road the maintenance which it should have. It would be a short-sighted economy if it were adopted merely as an economy measure. It is an expedient adopted because of the financial necessities of the present situation. The short-sightedness will be more apparent if they continue it in the summer than it is at this time of the year.

From Prof. Cunningham's theory as to the loss of $17,000,000 by the New England roads resulting from the adoption of the per diem basis, the Jersey Central during the year 1919 lost, if that theory is sound, $5,271,665.50. As a matter of fact, the Jersey Central has not paid out any money by the adoption of that basis. It
1566 has cars in excess of its needs and has credited them to per diem almost invariably.

Asked to indicate one, among other reasons, why the theory is, to his mind, unsound, the witness said:

"As an illustration, prior to the introduction of per diem and, say, in 1900, the car capacity was, I should estimate, 6/10 what it is today. In other words, it took 10 cars then to do the work that six cars do now; and, even if the theory upon which the figures are put up which show $17,000,000 for the New England roads were sound, it would still have to be reduced in the proportion of 6 to 10, which would bring them down—the New Haven to approximately $10,000,000 and the Jersey Central to approximately $3,000,000."

When the Boston & Maine pays a dollar per day rental on a car today, it is getting a car that, roughly speaking, is 40 per cent. greater in capacity than the car on which it would be paying the 3 cents a mile charge.

Witness excused.

Attorney Examiner Gerry then asked:

"Are we to hear anything from the transcontinental lines, the southern carriers or the short lines?" There was no response to this question.

Hearing closed.

311 District Court of the United States, Southern District of New York.

In Equity.

23–226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Stipulation.

In the above entitled case it is stipulated that an order may be entered approving the statement of evidence prepared by the appellants and providing that the transcript on appeal shall contain the portions of the record stated in the præcipe filed by the appellants with the exception of item 6, being a petition of intervention of the Interstate Commerce Commission, no such paper having been filed, and with the exception of Exhibit 32 which was included by mistake.

WALTER C. NOYES,
H. T. NEWCOMB,
For the Petitioners.
BLACKBURN ESTERLINE,
Assistant to the Solicitor General,
By WALKER D. HINES,
For the United States.
WALKER D. HINES,
For the Interstate Commerce Commission.
CHARLES F. CHOATE, JR., &
JAMES GARFIELD,
By WINTHROP & STEVENSON,
For the Intervening Railroad Companies, Respondents.

312 District Court of the United States, Southern District of New York.

In Equity.

23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Order.

Upon the stipulation of the parties, it is

Ordered, that the statement of evidence prepared by the appellants be and the same hereby is approved and that the transcript on appeal shall contain the portion of the records stated in the præcipe filed by the appellants, with the exceptions noted in the stipulation.

Dated Oct. 11, 1922.

MARTIN T. MANTON,
JULIUS M. MAYER,
Circuit Judges, Acting as District Judges in Pursuance of the Act of October 22, 1913.

313 Copy.

13. *Affidavit of Charles L. Ewing.*

A.

In Equity.

No. 23-226.

District Court of the United States for the Southern District of New York.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent.

Affidavit of Charles L. Ewing.

STATE OF NEW YORK,
County of New York, ss:

Before me a Notary Public, duly commissioned to take affidavits in the State of New York, personally appeared Charles L. Ewing, who being duly sworn according to law, deposes and says:

I.

That he is Assistant General Freight Agent of The Central Railroad Company of New Jersey, one of the petitioners in the above-entitled suit; that he has been employed in the Traffic Department of The Central Railroad Company of New Jersey for about twenty years; that he became Assistant General Freight Agent of said Railroad in July, 1915, in which position he has served up to the present date, except that during the period of Federal control he was in the employ of the United States Railroad Administration in a like capacity; that he was a member of the Traffic Committee designated to represent the defendants in the proceeding before the Interstate Commerce Commission, entitled Bangor & Aroostook Railroad Company, et al., vs. Aberdeen & Rockfish Railway Company, et al., I. C. C. Docket No. 11756, in which the order of said Commission involved in the present suit was entered; that he attended most of the hearings before said Commission in said proceeding and that he has since reviewed the stenographic record of said proceeding.

314

II.

That there was no evidence whatever submitted to said Commission in said proceeding as to the percentage or amount or by which

the percentage or amount could be computed of any of the divisions received by The Central Railroad Company of New Jersey out of the joint class rates or commodity rates divided on a class rate basis applicable via the Maybrook or Mechanicville Gateways between points on The Central Railroad Company of New Jersey and points on the Central Vermont Railroad, the Central New England Railroad, the Maine Central Railroad or the Rutland Railroad, although a substantial part of the tonnage interchanged by The Central Railroad Company of New Jersey with said roads moves under said rates and routes.

That there was no evidence submitted to said Commission in said proceeding as to the percentage or amount or by which the percentage or amount could be computed of over 95% in number of the divisions received by The Central Railroad Company of New Jersey out of the joint class rates or commodity rates divided on a class rate basis applicable via the Jersey City Gateway between points on The Central Railroad Company of New Jersey and points on the New York, New Haven & Hartford Railroad, the Boston & Maine Railroad, the Central Vermont Railroad, the Central New England Railroad, the Maine Central Railroad, or the Rutland Railroad, and the isolated instances in which the percentage or amount of The Central Railroad Company of New Jersey's divisions out of such rates were stated were in no way representative or typical of the remainder of said divisions.

315 That there was no evidence submitted in said proceeding showing or tending to show that the divisions received by The Central Railroad Company of New Jersey out of any joint rates participated in by The Central Railroad Company of New Jersey and any one or more of said New England roads are unreasonable, inequitable or unjust to said New England roads or any of them.

That the affiant testified in said proceeding that there are fourteen different percentage arrangements for dividing joint class rates applicable between points on The Central Railroad Company of New Jersey and points in New England which, so far as The Central Railroad Company of New Jersey is concerned, vary according to the gateways and the carriers via which the joint rates apply, and that no one of said fourteen percentage arrangements for dividing joint rates is illustrative or typical of the other thirteen; that said affiant submitted in evidence in said proceeding a statement of the arrangement for dividing the joint class rates and similarly divided commodity rates applicable between points on The Central Railroad Company of New Jersey via the Maybrook Gateway and points on the New York, New Haven & Hartford Railroad, as Exhibit 90 in said proceeding; that the uncontroverted evidence submitted in connection with this Exhibit was that while the New York, New Haven & Hartford Railroad, on traffic moving under such joint rates between points on The Central Railroad Company of New Jersey and points on the New York, New Haven & Hartford Railroad under said divisions now receives an average of 65.7% of the joint revenue, it would receive upon a fifty-mile block basis of dividing said joint revenue only 51.8% of said joint revenue; that the affiant testified before the said Commission that this one of the fourteen arrange-

ments for divisions applicable between points on The Central Railroad Company of New Jersey and points in New England is
316 only illustrative of the other thirteen percentage arrangements for dividing joint rates in that,

"It shows generally that the allowances to the New England lines are considerably greater than the allowances to The Central Railroad of New Jersey; that is generally true of all of our divisions with the New England lines." (Rec. 1757.)

That the affiant testified in said proceeding that the arrangements for dividing joint rates as between The Central Railroad Company of New Jersey and the New England lines were, prior to April 1, 1922,

"very liberal and considerably more than they (the New England roads) would receive on a fifty-mile block basis." (Rec. 1768.)

and that,

"I have always had the opinion that they (referring to the divisions of the New England railroads with The Central Railroad Company of New Jersey) were very much more than fair to the New England lines." (Rec. 1807.)

To the same effect the affiant further testified as follows:

"Q. In general from your study of all of these bases in this manner and viewing the thing and testing the divi*d*ions solely on these standards of mileage prorate and fifty-mile block rates, what is your opinion as to all of the percentage divisions on the fourteen different bases?

"A. That they are all extremely liberal to the New England carriers; that the results as tested by the fifty-mile scale are practically the same as in the two exhibits we have just analyzed." (Rec. 1770-1.)

That so far as The Central Railroad Company of New Jersey is concerned, there is no evidence in the proceeding before said Commission to support or tending to support the "assumption" stated in the final decision of said Commission, as shown at page 188 of the Petition in this suit that prior to the past three or four years the bases of dividing joint rates between The Central Railroad Company of New Jersey and the New England lines "produced on the whole results which were fair."

317 III.

That there was no evidence submitted to said Commission in said proceeding as to the percentage or amount or by which the percentage or amount could be computed of the divisions received by The Central Railroad Company of New Jersey as an intermediate carrier, out of any of the joint rates applying between points in New England

and points located upon other roads connecting with said The Central Railroad Company of New Jersey.

IV.

That there was no evidence in said proceeding showing or tending to show that the uniform percentage increase prescribed by said order of said Commission would produce divisions of any or all of said joint class rates which would be reasonable, equitable or just as between the several carriers participating in said joint rates.

V.

That the uncontroverted evidence shows that prior to 1908 The Central Railroad Company of New Jersey had interchanged practically all traffic with New York, New Haven & Hartford Railroad at the Harlem River Gateway; that beginning in 1908 the New York, New Haven & Hartford Railroad announced that it would thereafter interchange traffic with The Central Railroad Company of New Jersey only via the Maybrook Gateway; that The Central Railroad Company of New Jersey formally complained to the Interstate Commerce Commission against this action of the New York, New Haven & Hartford Railroad Company because, first, it would increase the mileage of the carriers west of the gateway, second, it would add one participating carrier to the route west of the gateway, and
318 third, it would short-haul the Jersey Central to the extent of seventy-three miles on practically all of its traffic moving to and from points on the New York, New Haven & Hartford Railroad, as well as on much of its traffic moving to and from points on the Boston & Maine Railroad and the Maine Central Railroad. Its complaint was filed in I. C. C. Docket No. 1400. The New York, New Haven & Hartford Railroad Company answered, denying the jurisdiction of the Commission to act in the premises. In view of the doubt as to the Commission's power, The Central Railroad Company of New Jersey compromised the case by an arrangement under which it has, ever since 1908, under protest, routed a large part of its traffic to and from New England points via the Maybrook instead of via the Jersey City gateway (Rec. 1750 et seq.); that although this forced routing of traffic short-hauls The Central Railroad Company of New Jersey to the extent of seventy-three miles and forces it to divide the revenue west of the gateway with an intermediate carrier, that is, The Lehigh & Hudson River Railroad Company, the divisions claimed by the New York, New Haven & Hartford Railroad Company and its subsidiary, the Central New England Railroad Company, out of the joint class rates applying between points on The Central Railroad Company of New Jersey and points on the New York, New Haven & Hartford Railroad Company, via this route, as shown by Exhibit 90, amount, on the average to about 65.7% of the total revenue and those received by The Central Railroad Company of New Jersey amount to only about 18%, whereas upon a fifty-mile block basis which is based upon relative mileage hauled, the divisions received by the New York, New Haven & Hart-

ford Railroad Company and its subsidiary, would amount to only 51.8%, while those received by The Central Railroad Company of New Jersey would amount to 29.1% of the joint revenue.

319 VI.

That the six New England railroads whose divisions are to be increased, if said order of said Commission is enforced, (New York, New Haven & Hartford Railroad Company, Boston & Maine Railroad Company, Maine Central Railroad Company, Central Vermont Railway Company, Rutland Railroad Company, and Central New England Railroad Company) do not constitute a traffic, rate or geographical group; that geographically the New England carriers include not only said six railroads, but also the Boston & Albany Railroad, the Bangor & Aroostook Railroad Company, the Grand Trunk Railway Company and the Canadian Pacific Railway Company; that in so far as the New England carriers have been recognized as a group for rate making purposes, the group includes not merely the six New England railroads in whose favor said order runs, but also the Boston & Albany Railroad; that said six New England carriers have no status as a group except that for the purposes of said proceeding before the Commission, they, together with the Bangor & Aroostook Railroad Company, acted as a self-constituted group in filing the complaint and in submitting group statistics in said proceeding, and the Commission by said order, has undertaken to give said six of said New England carriers a group status arbitrarily.

VII.

That although the order of said Commission is based in part upon a finding that:

"Complainants perform their part of the interchange service under less favorable conditions than their connections west of the Hudson River." (Petition p. 186.)

the uncontroverted evidence of record shows that The Central Railroad Company of New Jersey, in many of the respects specified by the Commission, is less favorably circumstanced than any one
320 of the New England roads, or than the New England roads as a group. Thus, regarding the relative terminal characteristics of The Central Railroad Company of New Jersey and the New York, New Haven & Hartford Railroad, Professor Cunningham, one of the chief witnesses for the New England lines, testified as follows:

"Mr. Elder: Just to illustrate it.—Of course you appreciate as I do that you cannot draw a conclusion from any one factor. There are a great many elements that you have to take into account in making any comparison between two roads; but, accepting your reasoning that the New England roads are handicapped because their average haul is shorter than that of the roads West of the river as a group, if that argument have any force, it must also be true, must it not, that since the average haul of the Jersey Central is only about

seventy miles, whereas the average haul of the New Haven is something over one hundred miles, therefore the Jersey Central has been more prejudiced by the increasing terminal costs of the last fifteen years than has the New Haven for example?

"Professor Cunningham: I think that is a fair statement.

"Mr. Elder: If that be so, if the Commission comes to the point in this proceeding, of trying to determine whether or not the relative costs of the New Haven and the Jersey Central on traffic interchanged between them and originating and destined on those two lines, have so changed in the last fifteen years as to prejudice one of the parties, then the conclusion from your argument is that it is the Jersey Central that has been more prejudiced by the trend of costs during these fifteen years?

"Professor Cunningham: I think that reasoning is sound.

"Mr. Elder: If that reasoning be sound, then in the same fashion that the New Haven is asking the Interstate Commerce Commission to require the roads west of the river to increase its divisions because of the alleged fact that terminal cost have increased more in the last fifteen years in New England than west of the river, the Jersey Central would have equal reason, would it not, to file a complaint with the Commission, asking that for the same reason, the divisions which it receives on traffic interchanged with the New Haven, should be increased rather than reduced?

"Professor Cunningham: The logic is sound." (Rec. 2681-3.)

Moreover, the uncontroverted evidence shows (Exhibit 207) that (1) the average haul of The Central Railroad Company of
321 New Jersey is 69.83 miles, whereas the average haul of the New York, New Haven & Hartford Railroad is 113.69 miles, of the Boston & Maine Railroad 124.2 miles, and of the New England roads as a group 112.19 miles, and that The Central Railroad Company of New Jersey (2) has a slower average train speed per hour, (3) the same or a smaller number of car miles per car day, (4) a larger percentage of yard switching locomotive miles to total locomotive miles, (5) a larger proportion freight stations (agency and non-agency) to miles of road, (6) a much larger percentage of yard-track and sidings to total main track mileage, and (7) a much larger percentage of empty car mileage to total car mileage than has the New York, New Haven & Hartford Railroad, or the Boston & Maine Railroad, or the New England railroads as a group.

VIII.

That although the order of the Commission is based in part upon a finding, which is stated in full in the Commission's decision as shown on page 190 of the Petition in this suit, that during the past three or four years the expenses of the New England carriers have increased in a greater proportion than those of their western connections, and that therefore,

"the scales which formerly hung approximately level as between the participating carriers are now tipped against the New England roads

and in favor of their western connections because of the disproportionate results of these changes."

and in support of this conclusion cites satistics to show that the financial needs of the New England roads, as compared with the needs of the other carriers in the eastern group, have become progressively worse during the past three or four years, there was no substantial evidence before *siad* Commission to support this conclusion, so far as The Central Railroad Company of New Jersey is concerned, and the uncontroverted evidence, (Exhibit 111) shows that just the
322 reverse is true when comparison is made between the financial statistics of The Central Railroad Company of New Jersey and those of the New England lines considered either separately or as a group. The figures quoted by the Commission in support of its conclusion are taken from Exhibit 111, and are as follows:

Statement Showing the Ratio of Net Railway Operating Income to Property Investment.

Roads compared.	Fiscal year 1917.	Calendar year 1919.	10 months 1920.
5 New England roads....	5.68	1.02	*d.* 3.10
32 Eastern carriers.....	5.63	1.84	*d.* .92

The same exhibit, that is, Exhibit 111, from which the above figures are quoted, shows the following data for The Central Railroad Company of New Jersey, as compared with five of the six New England roads defendant in this suit, considered individually and as a group.

Roads compared.	Fiscal year 1917.	Calendar year 1919.	10 months 1920.
C. R. R. Co. of N. J.....	9.46	.49	*d.* 3.21
New England roads:			
NY. NH. & H. RR.....	6.58	1.52	*d.* 2.49
Boston & Maine.....	4.59	1.42	*d.* 3.64
Central New England....	5.79	*d.* 1.19	*d.* 3.01
Maine Central.....	5.51	*d.* 2.43	*d.* 3.49
Rutland	5.06	.89	*d.* .50
Total New England roads	5.68	1.02	d. 3.10

As appears from the above, the financial condition of each of these carriers became progressively worse from 1917 at least to November, 1920, but that of The Central Railroad Company of New Jersey

(*d.* deficit.)

progressed downward to a greater extent than did that of any one of said New England roads.

The report of the Commission (Petition p. 187) also calls special attention to the abnormal increase experienced by the New England lines in the cost of their coal, but since coal is merely one of the items entering into the total operating expenses of a railroad, a com-
323 parison of total operating expenses seems more significant.

The uncontroverted evidence stated in the following table shows that, taking into account the increases in total operating expenses, including the increases in the cost of coal, The Central Railroad Company of New Jersey, during the past five or six years, has experienced a greater relative increase in its operating expenses than either the New York, New Haven & Hartford Railroad or the Boston & Maine Railroad:

Relative Operating Expenses.

Road.	Annual avge., June 30, 1914, to June 30, 1917 (*).	1918 (+).	1919 (+).	First ten months 1920 (ø).
C. R. R. N. J.....	¢$21,253,848	$36,369,271	$40,273,951	$44,044,451
N. Y., N. H. & H....	50,639,926	87,746,523	92,473,381	103,106,029
B. & M.....	39,419,173	64,430,772	66,023,668	73,740,928

IX.

The Commission makes no reference to the relative taxes paid by the carriers in the proceeding before it, but the statute requires this factor to be given due consideration, and the uncontroverted evidence of record (Exhibit 207) shows the following data regarding taxes paid by The Central Railroad Company of New Jersey as compared with those paid by the New England carriers:

Relative Taxes.

	C. R. R. N. J.	N. Y., N. H. & H.	B. & M.	New England roads.
Percentage of taxes to gross revenue	6.91%	3.82%	4.27%	4.2%
Taxes per mile of road operated...	$4,513	$2,072	$1,299	$1,306

These figures are all taken from the annual reports of the carriers to the Interstate Commerce Commission for the year 1919.

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X.

That although the order of the Commission is in part based upon a finding, as quoted *as* pages 196-7 of the Petition in this suit, that the effect of the order,

(*) Exhibit 24.
(+) Exhibit 127.
(ø) Exhibit 125.
(¢) Willard Exhibit A in Ex Parte 74 referred to in Exhibit 24.

"would manifestly be a benefit to them (the New England carriers) far greater than the detriment to their western connections."

this conclusion is arrived at by treating the New England roads and the other carriers as two groups but in considering the effect of the Commission's order upon The Central Railroad Company of New Jersey, as shown by Exhibit 10 in said proceeding before the Commission, The Central Railroad Company of New Jersey, although one of the smaller of the carriers against which the order is directed, interchanges more tonnage with the New York, New Haven & Hartford Railroad which is the chief New England carrier, than does any other trunk line, except the Pennsylvania Railroad. This circumstance emphasizes the fallacy involved in the theory of the Commission that it may fix the divisions as between carriers upon a group basis without serious detriment to some of the individual carriers in the group whose divisions are thus reduced.

(S.) C. L. EWING.

Sworn to and subscribed before me this 8 day of April, A. D. 1922.

(S.) FRED'K B. BLACKMAN,
Notary Public, Kings County, No. 330.

Certificate filed in New York County No. 145.
Kings Co. Reg. No. 3006, N. Y. Co. Reg. No. 3166.
Commission Expires March 30, 1923.

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13 B.

Copy.

United States District Court. Southern District of New York.

In Equity.

No. 23226.

THE AKRON, CANTON AND YOUNGSTOWN RAILROAD COMPANY et al., Petitioners,

vs.

UNITED STATES OF AMERICA, Respondent.

STATE OF NEW YORK,
County of New York,
City of New York, ss:

Dick T. Lawrence, being duly sworn, deposes and says:

He resides in Westfield, Union County, New Jersey.

That he now is and since February 28, 1920, has been employed by The Delaware, Lackawanna and Western Railroad Company as its General Freight Agent, with office and place of business at No. 90 West Street in the City and State of New York. During the period

December 1, 1915, to February 28, 1920, inclusive, he was a member of the Official Classification Committee, having an office and place of business at No. 143 Liberty Street in said City of New York, his employment as a member of said Committee during a portion of said period being by substantially all rail carriers operating in what is know as Official Classification Territory and during the balance of said period by the United States Railroad Administration. From May 1, 1911, to and including November 30, 1915, he was General Freight Agent of the Central Vermont Railway Company with offices and place of business at St. Albans, Vermont. During the period November, 1892 to and including April 30, 1911, he was employed by the Boston and Maine Railroad, the Central Vermont Railway Company, Grand Trunk Railway Company and various other common carriers by rail and water, with place of busi-
328 ness during part of said period at Boston, Massachusetts, and during the remainder at Buffalo, New York. During the period March 28, 1890, to and including October, 1892, his employment was by the Central New England and Western Railroad Company with place of business during part of said period at Poughkeepsie, New York, and at Hartford, Connecticut, during the remainder of said period.

During the periods above mentioned he was constantly engaged in various duties pertaining to the conduct of the affairs of the traffic departments of the several carriers by whom he was employed. Since May 1, 1903, he has continuously devoted attention to the matter of freight rates, classification of freight traffic and the divisions of freight rates between carriers for the carriers by whom he has been or now is employed. During more than eighteen years of his employment in railroad service his place of business was in the New England states and for more than twenty-five years his duties in railroad service pertained chiefly to freight traffic handled from, to and within said states.

He was a member of a committee of railroad traffic officers designated by the defendants to prepare and present the defense in a certain proceeding pending before the Interstate Commerce Commission entitled "Bangor and Aroostook Railroad Company et al. v. Aberdeen and Rockfish Railroad Company et al." (I. C. C. Docket No. 11,756).

That he heard much of the testimony adduced at the hearings in said proceedings and has since reviewed the official stenographic report of such testimony.

That the record of said proceedings gives no information whatever as to the percentage or amount, or by which the percentage or amount could be computed, of any of the divisions received
329 by the Delaware, Lackawanna and Western Railroad Company out of joint rates assessed on any freight traffic moving in either direction between any stations on the lines of the New England carriers on the one hand and any stations on the lines of the Delaware, Lackawanna and Western Railroad Company on the other hand, except testimony given by deponent himself at pages 1431 to 1434 of said record as to divisions of revenue accruing on cement in

carloads moving from a limited territory on the lines of the Delaware, Lackawanna and Western Railroad Company to Danbury, Connecticut, Bridgeport, Connecticut and Fall River, Massachusetts, which divisions are in no way typical of the divisions in general with respect to traffic moving in either direction between stations on the lines of the New England carriers and stations on the lines of the Delaware, Lackawanna and Western Railroad Company.

That in the first report of the Interstate Commerce Commission in said proceeding (Vol. 62 I. C. C., p. 513, 563) the Interstate Commerce Commission said:

"The age of the divisions affords no presumption that they are unreasonable; it may be that they were too liberal originally."

and in its second report (Vol. 66 I. C. C. p. 196, 200):

"The divisional arrangements exhibited of record are built upon block bases, and in some cases constructive mileage is used or arbitraries are added. As pointed out in our former report, the blocking is often irregular, inconsistent, and illogical. Nevertheless, this system of dividing the joint rates of the New England lines and their western connections has exjsted for a great many years, and, so far as the record shows, without complaint until the extraordinary changes of the past three years. It is a reasonable assumption that until then it produced on the whole results which were fair."

Deponent further says that said record contains no evidence whatever in support of the said Commission's statement that the

"system of dividing the joint rates of the New England lines and their western connections has existed for a great many years and, so far as the record shows, without complaint until the extraordinary changes of the past three years."

330-332 nor any evidence whatever to support an assumption that

"until then it produced, on the whole, results which were fair."

but that said record does contain uncontroverted evidence to the contrary thereof, inter alia, the following (Record pp. 1457-1458):

By Mr. Taylor:

Question. "That, perhaps is rather a general term. Do you think they are reasonable to the New England lines and to the New Haven Road, your direct connection?

By Deponent:

Answer. "I think they are more than reasonable, more than they should expect to receive. In fact, I may say that this matter has been the subject of consideration from time to time by the company which I represent. There have been negotiations and correspondence between the two companies running over a period of some years, in an

attempt to get a revision of these divisions in favor of the Lackawanna Road. They (the traffic officials of the Delaware, Lackawanna & Western Railroad Company) have never let up, have never been satisfied with it. I am speaking there of the New Haven Road. We have not been satisfied with the others, but the New Haven has appeared to us to be less satisfactory than the others."

(Signed by) DICK T. LAWRENCE.

Sworn to and subscribed before me this tenth day of April, 1922.
Attested by
ANDREW OCK.

333 In the District Court of the United States for the Southern District of New York.

In Equity.

#23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners,

vs.

UNITED STATES OF AMERICA, Respondent.

STATE OF NEW YORK,
County of New York, ss:

Henry Adams, being first duly sworn according to law, deposes and says:

I.

That he resides in the city of East Orange, N. J., and has his office and place of business at 71 West 23rd Street, New York City, N. Y.

That he is General Freight Agent of Erie Railroad Company, one of the petitioners in the above entitled suit. That he has been employed in the service of Erie Railroad Company and its predecessors, the New York, Lake Erie & Western Railroad Company and Erie Railway Company, for 52 years last past except for the period when he was in the service of the Director General of Railroads during the period of Federal control, and that he has occupied the position of General Freight Agent for Erie Railroad Company or for the Director General of Railroads for the period of 15 years last past. That prior to that time he was Assistant General Freight Agent, Division Freight Agent, Milk Freight Agent and Local Agent at various points, his service in such capacities beginning more than 45 years ago.

That he was a witness on behalf of Erie Railroad Company before the Interstate Commerce Commission in this case and attended

a large part of the hearing, and is familiar with the record before the Commission.

That in his capacity as General Freight Agent the arrangements for divisions of joint through rates between the Erie Railroad Company and its connections participating in joint through rates to and from points in New England come under his direct supervision, and he is and has been for many years past familiar with such arrangements and, from the records of the Company, with the history thereof prior to his personal participation in the management of such arrangements.

II.

That the railroad of Erie Railroad Company connects at Maybrook, N. Y. (sometimes referred to as Campbell Hall, N. Y.) with the railroad of the Central New England Railway Company, one of the complainants before the Interstate Commerce Commission in Docket 11756, and through the railroad of the Central New England Railway Company, the capital stock of which is substantially all owned or controlled by the New York, New Haven & Hartford Railroad Company, with the railroad of said New York, New Haven & Hartford Railroad Company. Maybrook is located about 25 miles southwest of the Poughkeepsie bridge crossing the Hudson
334 River, and about 65 miles railroad distance from Jersey City, N. J., the eastern terminus of the rails of Erie Railroad Company.

That Erie Railroad Company also handles a large amount of traffic moving to and from New England under joint through rates affected by the Commission's order in Docket 11756 via The Delaware and Hudson Company's railroad, which connects with the line of Erie Railroad Company at Binghamton, N. Y., and with the lines of the Boston & Maine Railroad Company at Mechanicsville, N. Y. The only direct connection of the rails of Erie Railroad Company with any of the complainants in Docket 11756 before the Interstate Commerce Commission is at Maybrook with the rails of the Central New England Railway Company.

III.

That there was no evidence before the Interstate Commerce Commission in Docket 11756 that as between Erie Railroad Company and/or its subsidiary the Chicago and Erie Railroad Company, of which the Erie Railroad Company owns the capital stock, and the Erie Railroad Company's connections the Central New England Railway Company and the New York, New Haven & Hartford Railroad Company, complainants in that docket, the divisions of joint rates, fares and charges were unjust, unreasonable or inequitable to the Central New England Railway Company and the New York, New Haven & Hartford Railroad Company, or either of them, and/or their connections, or unduly prejudicial to them or either of them, or unduly preferential to the Erie Railroad Company or Chicago and Erie Railroad Company and/or their connections.

That the evidence before the Interstate Commerce Commission in Docket 11756 relating to the efficiency with which the carriers concerned are operated, in so far as there is such evidence, does not set forth any facts with respect to the efficiency with which the railroad of Erie Railroad Company is operated, but is based entirely on comparisons of operating statistics relating to one or more of the complainants, on the one hand, but not covering the New England group as a whole, or all of complainants, and relating to a group or groups of carriers operating in territory outside of New England on the other, including other carriers in addition to the Erie System and in no way affiliated with it. That as to the amount of revenue required to pay their respective operating expenses, taxes and a fair return on their railway property held for and used in the service of transportation, the record indicates that the requirements of Erie Railroad Company for additional revenue to pay its operating expenses, taxes and a fair return on railway property held for and used in the service of transportation, are as great as that of the Central New England Railway Company and the New York, New Haven & Hartford Railway Company, its direct connections, or the complainants in Docket 11756 generally.

That during the period of Federal control terminating February 29, 1920, the Erie System incurred an average annual net railway operating deficit of $1,568,889, whereas the New Haven System earned an average annual net railway operating income during the same period of $5,203,226, and 7 New England complainant roads earned an average annual net railway operating income of $4,477,989; and during the same period, while the Erie System was incurring a net railway operating deficit, the New Haven System was earning a net railway operating income equivalent to 35.1% of the standard return payable by the United States under the Federal Control Act, and 8 New England lines were earning 12.8% of such standard return. That on the basis of the year ending June 30, 1920 "Adjusted" according to an estimate made by complainants' witness Brigham, adopted here only for the purpose of making this comparison, The Erie System's net railway operating income on property investment as of Oct. 31, 1919 was but 1.64% as against 1.37% for the New Haven System and 1.04% for the seven New England roads. That during the first 11 months of the calendar year 1920, the net railway operating deficit of the Erie Railroad exceeded that of the New Haven System by over $2,000,000. That during the 3-year test period referred to in the Federal Control Act, comprising the 3 years ended June 30, 1917, the ratio of total operating expenses to operating revenues on the Erie System was 72.43% as against 67.6% on the New Haven System and 69.8% on 7 New England lines complainants in Docket 11756, while during the period of Federal control the ratio of total operating expenses to operating revenues on the Erie System was 97.34% as against 87.6% on the New Haven System and 91.5% on the 8 New England lines. That all of these figures are taken from exhibits of record, both complainants' and respondents', in Docket 11756. That as between

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the Erie Railroad Company and its connections, and the Central New England Railway Company and New York, New Haven & Hartford Railroad Company and their connections, or other complainant lines, there is no evidence before the Interstate Commerce Commission in Docket 11756 as to the importance to the public of the transportation services of such carriers or as to whether any particular carrier is an originating, intermediate or delivering line, or any other fact or circumstance which would ordinarily, without regard to the mileage haul, entitle one carrier to a greater or less proportion than another carrier of the joint rate, fare or charge, which supports or tends to support the order of the Interstate Commerce Commission in Docket 11756. The evidence shows that all of the carriers referred to are of importance to the public, there being no evidence whatever as to the relative importance to the public of such carriers. The evidence shows that all of such carriers are originating, intermediate and delivering lines in connection with some of the traffic interchanged, and there is no evidence as to the relative degree to which the Erie Railroad Company and/or its connections are originating, intermediate or delivering lines as compared with the Central New England Railway Company, or the New York, New Haven & Hartford Railroad Company, and/or their connections or other complainant lines.

IV.

Formerly an interchange existed between the Erie Railroad Company and New York, New Haven & Hartford Railroad Company by car floats from the Harlem River to Jersey City, N. J. under which through rates were established on substantially the same basis to points in competitive territory as those previously established through the connection of the New York, New Haven & Hartford Railroad Company with the Pennsylvania Railroad Company at Jersey City and with substantially similar divisions of such through rates, notwithstanding the fact that the service performed by Erie Railroad Company and its connections was greater than the service performed by the Pennsylvania Railroad Company and its connections by reason of the greater length of haul required to reach points in such competitive territory, Erie Railroad Company and its connections being required to accept such divisions of joint through rates by reason of competition with the Pennsylvania Railroad Company and its connections. The competitive territory referred to, to which the length of haul by Erie Railroad Company and its connections is greater than via the Pennsylvania Railroad Company and its connections, comprises Cleveland, Ohio, and all territory west and south thereof, and thus includes a large part of the territory along the lines of the Erie System and nearly all of the points on the connections of the Erie System to and from which joint through rates from and to points in New England were established. Joint
336 through rates were also established with the New York, New Haven & Hartford Railroad Company via Jersey City to and from points on the lines of the Erie System. The divisions received

by the Erie Railroad Company on this traffic to and from points east of the western competitive territory above referred to were also unfavorable to it, due to the large arbitrary or constructive mileages allowed to the New York, New Haven & Hartford Railroad Company and its connections over and above the actual mileages of the hauls performed by them, and as compared with the mileages credited to the Erie Railroad Company in the computation of the divisions.

Subsequently the New York, New Haven & Hartford Railroad Company declined to continue interchange of traffic with the Erie Railroad Company at Jersey City and insisted upon such traffic being interchanged by car ferry across the Hudson River at Fishkill and Newburgh, N. Y., and still later the New York, New Haven & Hartford Railroad Company refused to continue the interchange at Fishkill and Newburg and insisted upon the transfer of the interchange to Maybrook, where the same has been conducted since 1904. These changes in point of interchange were not accompanied by any substantial change in the basis of divisions and while the mileage haul of the Erie System was slightly decreased, except to important manufacturing districts of New York and New Jersey, where it was increased, the actual mileage haul of the Erie System and its connections continued to be substantially longer to all western competitive points, as above described, than the haul via the Pennsylvania Railroad and its connections from Jersey City; and the Central New England Railway Company and New York, New Haven & Hartford Railroad Company likewise obtained a shorter haul on much of their traffic and eliminated the long and expensive car ferry in New York Harbor, in effect substituting therefor the Poughkeepsie Bridge. The arrangements established with respect to divisions via the Maybrook gateway were in many instances, and probably as a whole, less advantageous to the Erie System and its connections than to the Delaware, Lackawanna & Western Railroad Company and its connections, the Delaware, Lackawanna & Western Railroad being the competitor of the Erie Railroad, which interchanges with the Central New England Railway and the New York, New Haven & Hartford Railroad through Maybrook, which most closely parallels and competes with the Erie Railroad. The analysis of one month's cars received from connections by the Central New England Railway at Maybrook, as testified to by complainants' witness Slater, with similar study made of the cars received on five days in October 1920, which is also shown in the record, indicates that on the average the Central New England-New Haven System gets the benefit of an arbitrary or constructive mileage of at least twice the length of its average haul, whereas on through business, as indicated by the record, the Erie System is required to use in the computation of such divisions a mileage which is less than the actual mileage of its haul, and on business local to the Erie and Central New England-New Haven Railroads the record shows that the New Haven gets more than its proportionate allowance on an actual mileage basis, or on the basis of 50-mile blocks with 50 miles additional for initial and terminal lines, and the facts are as so shown and indicated by the record in this respect.

V.

That there was no evidence before the Interstate Commerce Commission in Docket 11756 as to the amount of revenue of Erie Railroad Company or of Chicago & Erie Railroad Company or of
337 any of their connections west of Maybrook, derived from traffic interchanged with the New England lines or any of them, either from such traffic as a whole or on any individual commodities, or under any specified rate or rates. That the only evidence as to revenue so derived was in the aggregate for Erie Railroad Company and its western connections without division or specification as between the participating carriers, or commodities or joint rates involved. That as to traffic participated in by the Erie System interchanged through the Delaware and Hudson Company's railroad with New England lines, the record contains no evidence as to the Erie System's revenue, or as to the aggregate of its revenue and that of its western connections, the only evidence as to such revenue including the Erie revenue without division or specification in the revenue of all carriers, including the Delaware and Hudson Company, west of the New England gateway.

VI.

That there was no evidence before the Interstate Commerce Commission as to how or to what extent any change in the divisions on joint through rates on traffic interchanged with New England lines would in the aggregate, or as to any particular traffic or commodity, affect the revenue derived by the Erie Railroad Company or Chicago and Erie Railroad Company, or either of them on such traffic separately or together and apart from all of their western connections participating in any part of such interchange traffic.

VII.

That all arrangements between the Erie Railroad Company and its western connections as to divisions of joint rates on traffic to and from New England are and have been in the past based upon and arrived at through agreements made by each and every carrier a party thereto, and have not been made effective without such agreement of all participating carriers, and are not and have not been based upon any agreement with New England connections as to the aggregate of divisions to the Erie System and its connections with a subsequent agreement between the Erie System and its western connections.

VIII.

That the order of the Interstate Commerce Commission if enforced will disturb the arrangements between the Erie System and its western connections, as such arrangements were made with reference to the amount in money to be received by the several partici-

pating carrirs as well as with reference to the percentage of the rate received by them respectively, and the requirement of a percentage contribution from existing divisions to the increase of the divisions received by New England lines changes the basis of the existing agreements, which in some instances involve arbitrary or minimum divisions.

IX.

That the Erie System derived no benefit in a larger percentage increase of freight rates under the order of the Interstate Commerce Commission in the case known as Ex Parte 74, by reason of its inclusion by the Interstate Commerce Commission in the Eastern Rate Group of carriers under Section 15*a* of the Interstate Commerce Act. That the Erie System if considered as a separate rate group under said Section 15*a* would have required a larger percentage of increase in rates to enable it to earn an aggregate annual net railway operating income equal to a fair return upon the aggregate value of its railway property held and used in the service of transportation, than
the Eastern Rate Group, with or without the inclusion of the
338 New England lines, or than the New England lines if considered as a separate rate group, or than the New Haven System, the only direct New England connection of the Erie System.

X.

That as between the several carriers involved in the interchange participated in by the Erie System to and from New England, the order of the Interstate Commerce Commission is wholly arbitrary and not supported by evidence as to the several carriers concerned, inasmuch as it is based on evidence, so far as there is any evidence at all, with respect to the several matters to which the Commission is required to give consideration under section 15 paragraph 5 of the Interstate Commerce Act, relating only to groups of carriers in the aggregate, such groups comprising carriers not participating in particular rates and divisions involved, and inasmuch as such order was made without evidence specifically and separately relating to the several carriers concerned in particular rates and divisions.

XI.

That the Interstate Commerce Commission under date of March 14, 1922, handed down a decision in the matter of divisions of joint rates, fares and charges on traffic interchanged between the Missouri & North Arkansas Railroad Company and its connections—Docket 13345, in which it compared the revenue needs of the Missouri & North Arkansas and its connections by use of various units derived in a uniform manner, described by the Commission as follows:

"For example, to secure unit comparisons embracing all revenues and all expenses we have adopted for use in some comparisons the

'equated ton-mile,' derived by adding to the freight ton-miles three times the passenger-miles, the ratio between freight revenues per ton-mile and passenger revenues per passenger-mile in that territory being approximately as 1 to 3. We have also aggregated all transportation service car-miles. It is, of course, understood that the reduction of gross earnings or expenses to units of this character does not produce absolutely correct results, but where the same method is used in all cases, the results afford a reasonable basis for comparison."

For purposes of comparison, the following figures are given from the reports of Erie Railroad Company and Chicago & Erie Railroad Company (combined) to the Interstate Commerce Commission under the column headed "Erie"; from the reports of the New York, New Haven & Hartford Railroad Company and Central New England Railway Company (combined) to the Interstate Commerce Commission under the column headed "New Haven System," for the year 1920; and from the annual report of the New York, New Haven & Hartford Railroad Company to its stockholders for the year 1921 under the heading "New Haven," the 1921 figures for the Central New England Railway Company not being at present available to deponent. The ratios between freight revenues per ton-mile and passenger revenues per passenger-mile used in the computation are those actually existing on each railroad. If the same ratio were used for all three roads, it would change the differences per equated ton-mile but leave the same road's figures greater or less than the other's except for net railway operating income in 1921, where they would become approximately the same.

339 & 340 *Comparison of Unit Revenues, Expenses, and Return for the Calendar Years* 1920 *and* 1921.

	1920.		1921.	
	Erie.	N. Y., N. H. & H. and C. N. E.	Erie.	N. Y., N. H. & H.
Gross revnue:				
Per equated ton-mile—cents	.946	2.042	1.136	2.396
Per car-mile "	18.544	45.977	18.464	44.483
Per train-mile "	568.	634.	582.	648.
Operating expenses:				
Per equated ton-mile "	1.030	2.095	1.063	2.191
Per car-mile "	20.191	47.172	17.274	40.660
Per train-mile "	618.	650.	545.	592.
Net revenue:				
Per equated ton-mile "	*d.* .084	*d.* .053	.073	.205
Per car-mile "	*d.* 1.647	*d.* 1.195	1.190	3.823
Per train-mile "	*d.* 50.	*d.* 16.	37.	56.
Net railway operating income:				
Per equated ton-mile "	*d.* .132	*d.* .283	.012	.015
Per car-mile "	*d.* 2.580	*d.* 5.017	.189	.283
Per train-mile "	*d.* 79.	*d.* 69.	6.	4.

Note.

Comparison of Unit Revenues, etc.—Continued.

	1920.		1921.	
	Erie.	N. Y., N. H. & H. and C. N. E.	Erie.	N. Y., N. H. & H.
Gross revenue:				
Return per $1,000 investment:				
Gross revenue—dollars	255.60	322.67	237.33	307.66
Net revenue "	d. 22.704	d. 8.386	15.297	26.437
Ry. operating income (net)	d. 35.557	d. 35.207	2.431	1.956
Rate per centum:				
Gross revenue—dollars	25.560	32.27	23.73	30.766
Net revenue "	d. 2.270	d. .839	1.530	2.644
Ry. operating income (net)	d. 3.556	d. 3.521	.243	.196

NOTE.—Net railway operating income for 1921 for Erie was $1,161,893; for New Haven $740,034; or a difference of $421,859.

(*d.* signifies deficit.)

On the basis of the comparison employed by the Interstate Commerce Commission in the Missouri & North Arkansas report, it clearly appears that there is no justification for subtraction from the revenues of the Erie system for the purpose of increasing the divisions of the New Haven System on joint through traffic in which they both participate. Deponent's best estimate of the amount required to be deducted annually from the revenues of the Erie System by reason of the decision of the Commission in Docket 11756 very largely exceeds the total difference between the net railway operating income of the Erie System for 1921 and the net railway operating income of the New York, New Haven & Hartford Railroad Company for the same year.

(Sgd.) HENRY ADAMS.

Sworn to before me this 20th day of April, 1922.
[L. S.] A. L. TRAVIS,
Notary Public, No. 135, Kings County.

Certificate Filed in New York County No. 87.
My Commission Expires March 30, 1923.
N. Y. County Register's Office No. 3093.

341 [Endorsed:] Affidavit of Henry Adams.

13 D.

342 District Court of the United States for the Southern District of New York.

In Equity.

THE AKRON, CANTON AND YOUNGSTOWN RAILROAD COMPANY et al., Petitioners,

v.

THE UNITED STATES OF AMERICA, Respondent,

Affidavit of Harry S. Bradley.

CITY, COUNTY, AND STATE OF NEW YORK, *ss:*

Harry S. Bradley, being first duly sworn, according to law, deposes and says:

1. That he is a resident of the City of Toledo, in the State of Ohio, and has his principal place of business at Cherry Street Station of The Ann Arbor Railroad Company, in said City.

2. That he is the Traffic Manager and head of the Traffic Department of the said The Ann Arbor Railroad Company, and has held said position continuously for the past eleven years, except that

during the period of Federal control, he held said position under the Federal Manager in charge of the property of said rail-
343 road company, for the United States Railroad Administration. During substantially the whole period of Federal control, affiant was a member of the Auxiliary Committee designated by the Director General of Railroads to have charge and exercise direction of all freight traffic matters in Central Freight Association territory. That for a period of more than fourteen years prior to his connection with said The Ann Arbor Railroad Company affiant was employed in various capacities in the traffic departments of the following railways, that is to say: Wabash Railroad Company; Wheeling & Lake Erie Railroad Company; Wabash Pittsburgh Terminal Railway; Cleveland, Cincinnati, Chicago & St. Louis Railway Company; Illinois Central Railroad Company; Erie Railroad Company, and St. Louis, Iron Mountain & Southern Railway Company. That in his said capacities, affiant is familiar, and has long been familiar, with freight rates in the region traversed by the railroad of said The Ann Arbor Railroad Company and in adjacent and surrounding territory, and with the joint freight rates applicable to joint routes participated in by said The Ann Arbor Railroad Company, and also the joint rates applicable to freight shipments over other routes of railway, and railway and water carriers, in adjacent and surrounding territory, and that said joint rates and joint routes cover and have covered freight transported in and out of and into and through the territory traversed by the railroad of said The Ann Arbor Railroad Company, including freight originating in and destined to points in the New England States and originating in and destined to points located in substantially all portions of the
344 United States.

3. That Central Freight Association territory includes that portion of the United States roughly bounded on the east, by a line drawn from Buffalo, New York; through Tonawanda, New York; Salamanca, New York; Pittsburgh, Pennsylvania; Wheeling, West Virginia, and Huntington, West Virginia, to Charles Town, West Virginia; bounded on the South by the Ohio river, and bounded on the West by the Mississippi river and the Wisconsin-Illinois State line and the west shore of Lake Michigan, and bounded on the north by the Great Lakes. The railroads in the territory described, are commonly designated as Central Freight Association lines.

4. That for a long period of years, including the whole period of affiant's experience, as aforesaid, in connection with traffic matters in said Central Freight Association territory, the railways traversing said territory have participated in joint rates and joint routes applicable to the movement of freight to, out of and through said Central Freight Association territory and that to a large extent, and in very many instances, each of the following railroad companies, that is to say, the Central New England Railroad Company; Bangor and Aroostook Railroad Company; Boston & Maine Railroad; Central Vermont Railway Company; Maine Central Railroad Company;

The New York, New Haven and Hartford Railroad Company; Rutland Railroad Company; The Canadian Pacific Railway
345 Company, and Grand Trunk Railway Company of Canada have, respectively, been parties to such joint rates and joint routes. That throughout the whole of said period, the freight charges accruing under such joint rates and in respect of such joint routes have been divided among the several carriers participating therein in each case, in accordance with agreements and contracts between and among said several participating railways, such agreements and contracts usually providing for divisions in accordance with agreed percentages and in some cases, providing for divisions in accordance with agreed percentages, after first deducting arbitrary sums in favor of one or more participants in said joint routes.

5. That affiant has been and is familiar with the proceeding before the Interstate Commerce Commission instituted by a complaint filed on or about August 28, 1920, by the Central New England Railway Company and other companies, in which said Commission, as of the date of January 30, 1922, entered the order served on defendants in said proceeding on February 14, 1922, the validity of which said order is in issue in the above entitled proceeding. That as head of the Traffic Department of said The Ann Arbor Railroad Company, and as a member of a traffic Committee appointed by said Central Freight Association lines, it became and was the duty of affiant to follow said proceeding closely and to acquaint himself with the testimony and record before said
346 Commission in said proceeding, and to examine and study said record for the purpose of acquainting himself fully with all testimony in any way bearing upon or affecting the divisions received by said Central Freight Association lines and said The Ann Arbor Railroad Company, and that affiant has so studied and examined said record and testimony and has said record and testimony examined by employees working under his direction and attached to the Traffic Department of said The Ann Arbor Railroad Company and affiant is fully acquainted with said record and testimony.

6. That said record does not contain any testimony to the effect that the divisions of joint rates participated in by any of the railroads operating in the several New England States and also by said The Ann Arbor Railroad Company, or also by any other railroad or railroads operating in said Central Freight Association territory, are or will become unreasonable, inequitable or unjust to said New England railroads or any of them, in such manner or in such degree, that the extent of such unreasonableness, inequity or injustice can be measured, or approximately measured, by a uniform percentage applied to all said divisions of all such joint rates and said record contains no evidence to the effect that a uniform modification of all said divisions and joint rates could be so applied as to produce divisions among the several carriers participating in such joint routes which would be reasonable, equitable and just.

7. That said record contains no evidence whatever, showing or tending to show that divisions of joint rates participated in
347 by said New England railroads, or any of them, and said The Ann Arbor Railroad Company are or will become unreasonable, inequitable or unjust to said New England railroads, or any of them, and said record contains no evidence whatever as to the divisions received by said The Ann Arbor Railroad Company out of joint rates participated in by said New England railroads, or any of them, except the evidence given by affiant, which said evidence appears on pages 2,100 to 2,130 and pages 2,274 to 2,389 of said record and all said evidence shows and tends to show that the divisions received by said The Ann Arbor Railroad Company out of said joint rates are no more than reasonable, equitable and just to said The Ann Arbor Railroad Company and are not unreasonable, inequitable or unjust to said New England railroads, or any of them.

8. That said record contains no testimony showing the amounts received out of joint rates participated in by said New England railroads, or any of them, by any of the following companies, that is to say: The Pittsburgh & Lake Erie Railroad Company; The Wheeling & Lake Erie Railway Company; The Hocking Valley Railway Company; The Akron, Canton & Youngstown Railway Company; Bessemer & Lake Erie Railroad Company; Central Indiana Railway Company; The Chesapeake & Ohio Railway Company; The Chicago & Alton Railroad Company; The Cincinnati, Indianapolis & Western Railroad Company; The Dayton & Union Railroad Company; Detroit, Bay City & Western Railroad Company; In-
348 diana Harbor Belt Railroad Company; The Kanawha & Michigan Railway Company; Kanawha & West Virginia Railroad Company; The Toledo & Ohio Central Railway Company; The Zanesville & Western Railway Company; Alabama & Northwestern Railroad Company; Aberdeen & Rockfish Railroad Company; Abilene & Southern Railway Company; Alabama & Mississippi Railroad Company; Alabama & Vicksburg Railway Company; Alabama Central Railway; Alabama Central Railroad Company; Alabama, Florida & Gulf Railroad Company; Alabama Great Southern Railroad Company; The Alabama Northern Railway Company; Alabama, Tennessee & Northern Railroad Corporation; Albemarle Steam Navigation Company; Alcolu Railroad Company; The Algoma Central & Hudson Bay Railway Company; The Altamaha Navigation Company; Apalachicola Northern Railroad Company; Arcade & Attica Railroad Corporation; The Arizona & New Mexico Railway Company; Arizona Eastern Railroad Company; Arizona Southern Railroad Company; Ashland Coal & Iron Railway Company; Ashley & Dustin Steamer Line; The Atchison, Tokepa & Santa Fe Railway Company; Atlanta & St. Andrews Bay Railway Company; Atlanta & West Point Railroad Company; Atlanta, Birmingham & Atlantic Railway Company; Atlantic & Yadkin Railway Company; Atlantic Coast Line Railroad Company; Augusta Northern Railway; Bachman Valley Railroad Company of

Maryland; Bauxite & Northern Railway Company; The Beaumont, Sour Lake & Western Railway Company; The Belt Railway Company of Chicago; Bennetsville & Cheraw Railroad Company;
349 Big Fork & International Falls Railway Company; Birmingham & Northwestern Railway Company; Birmingham & Southeastern Railway Company; Birmingham Southern Railroad Company; Black Mountain Railway; Bloomsburg & Sullivan Railroad Company; Blue Ridge Railway Company; Boyne City, Gaylord & Alpena Railroad Company; Bullfrog-Goldfield Railroad Company; Butte, Anaconda & Pacific Railway Company; Carolina & Northeastern Railroad Company; Carolina & Tennessee Southern Railway Company; The Carolina & Yadkin River Railway Company; Carolina, Clinchfield & Ohio Railway; Carolina, Clinchfield & Ohio Railway of South Carolina; Central California Traction Company; Central of Georgia Railway Company; Central Railway Company of Arkansas; Charleston & Western Carolina Railway Company; Chicago & Illinois Midland Railway Company; Chicago & Illinois Western Railroad; Chicago & North Western Railway Company; Chicago & West Ridge Railroad; Chicago Junction Railway Company; Chicago, Kalamazoo & Saginaw Railway Company; Chicago, Memphis & Gulf Railroad Company; Chicago, Milwaukee & Gary Railway Company; Chicago, Peoria & St. Louis Railroad Company and Bluford Wilson and William Cotter, receivers; Chicago, Racine & Milwaukee Line; St. Paul, Minneapolis & Omaha Railway Company; Chicago Short Line Railway Company; Chicago, Terre Haute & Southeastern Railway Company; Cincinnati, Georgetown & Portsmouth Railroad; The Cincinnati, Lebanon & Northern Railway Company; The Cincinnati, New Orleans & Texas Pacific Railway Company; The Cleveland & Buffalo Transit Com-
350 pany; Clinton & Oklahoma Western Railway Company; Coal & Coke Railway Company; Coeur d'Alene & Pend d'Oreille Railway Company; Coeur d'Alene & St. Joe Transportation Company; The Colorado & Southeastern Railroad Company; The Colorado & Southern Railway Company; Columbia, Newberry & Laurens Railroad Company; Copper Range Railroad Company; Cornwall Railroad Company; Coudersport & Port Allegany Railroad Company; The Dayton, Toledo & Chicago Railway Company; The Denver & Rio Grande Railroad Company and A. R. Baldwin, receiver; The Detroit & Huron Railway Company; Detroit & Mackinac Railway Company; Detroit, Toledo & Ironton Railroad Company; Duluth & Northeastern Railroad Company; Duluth, Missabe & Northern Railway Company; The Duluth, South Shore & Atlantic Railway Company; Duluth, Winnipeg & Pacific Railway Company; The East Jordan & Southern Railroad Company; The East St. Louis Connecting Railway Company; East Tennessee & Western North Carolina Railroad Company; El Paso & Southwestern Company; Erie & Michigan Railway & Navigation Company; Escanaba & Lake Superior Railroad Company; Evansville & Indianapolis Railroad Company and W. P. Kappes, receiver; Des Moines & Southern Railroad Company; Fort Smith & Western Railroad Company and A. L. Mills, receiver; Fort Wayne, Cincinnati & Louisville Railroad

Company; The Fort Worth & Denver City Railway Company; Fort Worth & Rio Grande Railway Company; Georgia & Florida Railway and W. R. Sullivan, John F. Lewis, and L. M. Williams, receivers;
The Georgia, Florida & Alabama Railway Company; Georgia
351 Northern Railway Company; Georgia Railroad; Georgia Southern & Florida Railway Company; Georgia Southwestern & Gulf Railroad Company; Goodrich Transit Company; The Great Northern Railway Company; Green Bay & Western Railroad Company; Gulf & Ship Island Railroad Company; Gulf, Colorado & Santa Fe Railway Company; Gulf, Florida & Alabama Railway Company and John T. Steele, receiver; Gulf, Mobile & Northern Railroad Company; Gulf, Texas & Western Railway Company; Hill Steamboat Line; Houston & Brazos Valley Railroad Company and George C. Morris, receiver; Houston & Shreveport Railroad Company; Houston & Texas Central Railroad Company; The Houston East & West Texas Railway Company; Illinois Northern Railway; Illinois Traction Company; Kalamazoo, Lake Shore & Chicago Railway Company; The Kansas City, Clinton & Springfield Railway Company; Kansas City, Kaw Valley & Western Railway; The Kansas City, Mexico & Orient Railroad Company and William T. Kemper, receiver; Kansas City, Mexico & Orient Railway Company of Texas; Kansas City Northwestern Railroad and L. S. Cass, receiver; The Kansas City Southern Railway Company; Kansas, Oklahoma & Gulf Railway; Kentucky & Tennessee Railway; Kewaunee, Green Bay & Western Railroad Company; Lake Superior & Ishpeming Railway Company; Little Kanawha Railroad Company; The Lorain & West Virginia Railway Company; The Lorain, Ashland & Southern Railroad Company; Los Angeles & Salt Lake Railroad Company; Louisiana & Arkansas Railway Company; Louisiana Railway & Navigation Company; Louisiana Southern Railway Company; Louisiana Western Railroad Company;
352 Louisville & Nashville Railroad Company; Louisville, Henderson & St. Louis Railway Company; Louisville, New Albany & Corydon Railroad Company; Macon & Birmingham Railway Company and H. W. Miller, receiver; Macon, Dublin & Savannah Railroad Company; Manistee & Northeastern Railroad and The Michigan Trust Company, receiver; Manistique & Lake Superior Railroad Company; Memphis, Dallas & Gulf Railroad Company; Minneapolis, St. Paul and Sault Ste. Marie Railway Company; Missouri & North Arkansas Railroad Company; and C. A. Phelan, receiver; Missouri, Kansas & Texas Railway Company and C. E. Schaff, receiver; Missouri, Oklahoma & Gulf Railway Company of Texas; Missouri Pacific Railroad Company; Mobile & Ohio Railroad Company; Montour Railroad Company; Morgan's Louisiana & Texas Railroad & Steamship Company; Munising, Marquette & Southeastern Railway Company; Nashville, Chattanooga & St. Louis Railway; Natchez & Southern Railway Company; Natchez, Columbia & Mobile Railroad Company; Nevada-California-Oregon Railway; The Nevada Northern Railway Company; New Jersey, Indiana & Illinois Railroad Company; New Orleans & Northeastern Railroad Company; New Orleans Great Northern Railroad Com-

pany; New Orleans, Natalbany & Natchez Railway Company; New Orleans, Texas & Mexico Railway Company; Northern Alabama Railway Company; Northern Pacific Railway Company; The Oklahoma, New Mexico & Pacific Railway Company; Oregon Short Line Railroad Company; Pacific Coast Railroad Company; Pacific Electric Railway Company; Panhandle & Santa Fe Railway Com-
353 pany; Peoria Railway Terminal Company; Pere Marquette Line Steamers; The Pittsburgh & West Virginia Railway Company; The Pittsburgh, Lisbon & Western Railroad Company; Pontiac, Oxford & Northern Railroad Company; Prescott & Northwestern Railroad Company; Puget Sound Navigation Company; Pullman Railroad Company; Quanah, Acme & Pacific Railway Company; Quincy, Omaha & Kansas City Railroad Company; Rio Grande & Eagle Pass Railway Company; Rio Grande, El Paso & Santa Fe Railroad Company; The St. Joseph & Grand Island Railway Company; St. Louis & Hannibal Railroad Company; The St. Louis, Brownsville & Mexico Railway Company; St. Louis, El Reno & Western Railway Company and Arthur L. Mills, receiver; St. Louis, Kennett & Southeastern Railroad Company; St. Louis Merchants Bridge Terminal Railway Company; St. Louis-San Francisco Railway Company; St. Louis, San Francisco & Texas Railway Company; St. Louis Southwestern Railway Company; St. Louis Transfer Railway Company; Salt Lake & Utah Railroad Company; San Antonio & Aransas Pass Railway Company; San Antonio, Uvalde & Gulf Railroad and A. R. Ponder, receiver; Sandersville Railroad Company; Savannah & Atlanta Railroad Company; Savannah & Statesboro Railway Company; Seaboard Air Line Railway Company; Southern Pacific Company Southern Railway Company; Southern Railway Company in Mississippi; South Georgia Railway Company; Spokane & British Columbia Railway; Spokane & Eastern Railway & Power Company; Spokane International
354 Railway Company; Spokane, Portland & Seattle Railway Company; Tennessee & North Carolina Railroad Company and James G. Campbell, receiver; Tennessee Alabama & Georgia Railroad Company; Tennessee Central Railroad Company and H. W. Stanley and W. H. McAllister, receivers; Terminal Railroad Association of St. Louis; Texarkana & Fort Smith Railway Company; Texas & New Orleans Railroad Company; The Texas & Pacific Railway Company and J. L. Lancaster and Charles L. Wallace, receivers; The Texas Mexican Railway Company; Texas Midland Railroad; The Trinity & Brazos Valley Railway Company and John A. Hulen, receiver; Union Pacific Railroad Company; Valdosta, Moultrie & Western Railway Company; Vicksburg, Shreveport & Pacific Railway Company; The Wabash, Chester & Western Railroad Company and J. Fred Gilster, receiver; Wadley Southern Railway; Washington, Idaho & Montana Railway Company; Waterloo, Cedar Falls & Northern Railway Company; Waupaca-Green Bay Railroad Company; Wayeross & Southern Railroad Company; Wayeross & Western Railroad Company; The Western Pacific Railroad Company; The Western Railway of Alabama; West Side Belt Railroad Company; The Wichita Valley Railway Company; Wiggins Ferry

Company; Winston-Salem Southbound Railway Company; Wisconsin & Michigan Railroad Company; and The Youngstown & Ohio River Railroad Company.

9. That the record in said proceeding, on page 271 thereof, shows that Mr. George H. Eaton was called, on December 16, 1921, as a witness on behalf of the complainants in said proceeding
355 and having been duly sworn, testified that he was on said date, assistant freight manager of the Boston & Maine Railroad, one of said complainants, and had occupied that position for three years, and had previously been in the traffic department of said The Boston & Maine Railroad for some thirty-odd years, and for the last fifteen years, had dealt almost entirely with rates and divisions. That said record, on pages 847-8, said Eaton being under cross-examination, includes the following:

"Q. Now look at your rate to Concord. There again your haul is about the same as the New York Central haul.
"A. From Concord the haul is greater.
"Q. Yes. What do you think about the division of the 84-cent rate first class?
"A. As to that particular rate I should say that that was a fair division.
"Q. As it stands?
"A. As it stands; yes, sir.
"Q. What do you think about the sixth class rate?
"A. I should say the same thing was true."

That said record, on page 849, said Eaton being under cross-examination, includes the following:

"Q. Take the rate through Concord and Newark; the first class rate of 84 cents. What do you think of that division?
"A. Well, I do not know that I can say that it is an unfair division.
"Q. How about the rate on sixth class?
"A. Nor that."

356 That said record, on page 850, said Eaton being under cross-examination, includes the following:

"Q. So you do not attempt to claim anything as regards those specific rates, dealing with them in that way—anything improper in the present basis of divisions?
"A. Those that you have mentioned?
"Q. Yes, sir.
"A. No, sir.
"Q. Let us look between Concord and Philadelphia, to go a little further down. Take the first class rate there. Do you think that there is anything improper in the present division?
"A. No, I should say not.
"Q. Look at the sixth class rate.
"A. I should say it was a fair division as to that particular rate."

That said record, on page 851, said Eaton being under cross-examination, includes the following:

"Q. Are there any rates on that sheet that you think are improperly divided, Mr. Eaton?

"A. Mr. Bikle, I have not made a study of these individual rates by themselves. I have made a study of this division proposition as a whole; and, as I have before stated, there are spots as shown on this exhibit indicating that the division is a fair division."

That said record, on page 853, said Eaton being under cross-examination, includes the following:

357–359 "Q. Now, do you think that in that situation you can say, Mr. Eaton, that those divisions on page 4 are unreasonable to you?

"A. Taken by themselves, no."

That said record, on page 874, said Eaton being under re-direct examination by counsel for complainants, includes the following:

By Mr. Choate:

"Q. Now, without going into detail, through the various sheets of your exhibit, Mr. Eaton, are there a large number of instances on both sides of the line; that is, instances like those which Mr. Bikle called to your attention, and an equal or perhaps larger number of instances where on the traffic which moves in the greatest volume you are suffering considerable disadvantage?

"A. I think that is true; yes, sir."

(Signed) HARRY S. BRADLEY.

Subscribed and sworn to before me, on this 29th day of March, 1922.

[SEAL.] FLORENCE LOEWENTHAL,
Notary Public, Bronx County, No. 42.

New York County No. 154.
My Commission Expires March 30, 1924.

360 13 E.

District Court of the United States for the Southern District of New York.

In Equity.

THE AKRON, CANTON AND YOUNGSTOWN RAILROAD COMPANY et al., Petitioners,

v.

THE UNITED STATES OF AMERICA, Respondent.

Affidavit of William G. Story.

CITY, COUNTY, AND STATE OF NEW YORK, *ss:*

William G. Story, being first duly sworn according to law, deposes and says:

1. That he is General Freight Agent of The Delaware and
361 Hudson Company, one of the petitioners in the above entitled proceeding, and resides and has his office and principal place of business in Albany, in the State of New York.

2. That he has been General Freight Agent for the last five years of said The Delaware and Hudson Company except that during the period of Federal Control he performed the same duties as General Freight Agent and for part of the time as Assistant General Freight Agent, employed by and acting for the United States Railroad Administration. That he entered the service of said The Delaware and Hudson Company in the year 1914 as Chief Clerk in the office of the Freight Traffic Manager of the said company. That immediately previous to his said service with said company affiant was continuously employed for sixteen years in the General Freight Department of the Pennsylvania Railroad Company, holding successively the positions of Clerk, and Chief Rate Clerk. That during the whole period of his employment by said The Delaware and Hudson Company and said Pennsylvania Railroad Company, affiant has been familiar with the arrangements for the division of through rates applicable to freight traffic moved over through routes partici-
pated in by said companies, including freight traffic inter-
362 changed with railroads operating in the New England States and in many cases passing over two or more railroads in said New England States and also over two or more railroads operating west of said New England States. That affiant has participated to a very large extent in negotiations leading to agreements for the division of such through rates applicable to freight traffic so interchanged and in the making of agreements for such divisions and is now and has been familiar with all the agreements to which said The Delaware and Hudson Company is a party relating to the division of such rates.

3. That the usual and ordinary form of the agreements for the division of such interchanged traffic is a division sheet showing (1) the point of origin, (2) the point of destination, (3) the names of all the several railroads participating in the through route, and (4) opposite the name of each said railroad the percentage of the through rate which it is agreed that such railroad shall receive. That for example the division sheet applicable to the through route from Vandalia, Illinois, to North Adams, Massachusetts, which is formed by railroads of respectively (1) Boston and Maine Railroad, (2) The Delaware and Hudson Company, and (3) Pennsylvania Railroad Company, shows the names of each of said railroad companies and shows that Boston and Maine Railroad receives 15.9 per cent of said through rate, that the railroad of The Delaware and Hudson Company receives 13.2 per cent of said through rate and the railroad of Pennsylvania Railroad Company receives 70.9 per cent of said through rate.

363–365 4. That the agreements in regard to divisions of rates applicable to through routes to which The Delaware and Hudson Company is a party are kept in the office of affiant and that copies thereof are placed in the hands of the accounting officers of said The Delaware and Hudson Company, and of the other companies participating in the respective through routes, and periodical distributions of the revenue received from said through rates are made between and among the respective companies participating therein, and that for the purposes of these settlements it is the practice that each said agreement shall provide the specific proportion or amount of the revenue from each said through rate which is ultimately to be distributed to each of the several participants in each said through route.

(Signed) WM. G. STORY.

Subscribed and sworn to before me on this seventeenth day of April, 1922.

[SEAL.] (Signed) FLORENCE LOEWENTHAL,
Notary Public, Bronx County, No. 42.

New York County No. 154.
My Commission Expires March 30, 1924.

366 15. *Opinion of United States District Court by Judge Manton.*

In the United States District Court for the Southern District of New York.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and INTERSTATE COMMERCE COMMISSION, Intervening Respondent.

Before the Honorable Charles M. Hough, the Honorable Martin T. Manton, and the Honorable Julius M. Mayer, United States Circuit Judges, Sitting in the District Court Pursuant to the Act of October 22, 1913 (38 Stat., 220).

Suit for an Interlocutory Injunction Restraining the Enforcement of an Order of the Interstate Commerce Commission.

Denied.

367 Walter C. Noyes, R. W. Barrett, John C. Bills, George F. Brownell, Clyde Brown, N. S. Brown, A. H. Elder, W. S. Jenney, H. T. Newcomb, Charles C. Spaulding, Solicitors for Petitioners.

George F. Brownell, H. A. Taylor, of Counsel for Erie R. R. System.

Walker D. Hines, J. Carter Fort, Solicitors for Intervening Respondent.

P. J. Farrell, of Counsel.

Charles F. Choate, Jr., James Garfield, Counsel for Intervenors.

Blackburn Esterline, Special Assistant to the Attorney General, for Respondent.

MANTON, *Circuit Judge:*

This is a proceeding under the Urgent Deficiencies Act approved October 22, 1913 (38 Stat. 219) and the Commerce Court Act approved June 18, 1910 (36 Stat. 539), by forty-four steam railroad companies operating west of the Hudson River, to annul and enjoin the order of the Interstate Commerce Commission of January 30, 1922, which allowed an increase of fifteen per cent (15%) in divisions accruing to certain carriers operating in the New England States on traffic moving on through joint rates. The United States of America and the Interstate Commerce Commission are made
368 respondents. The New England railroads have been permitted to intervene. The order of January 30, 1922 was entered on complaint of the New England lines asking for an increase of their divisions with the petitioners under the provisions of §15

of the Interstate Commerce Commission Act known as the Transportation Act of 1920 (41 Stat. 474). The original complaint filed with the Commission, dated August 8, 1920, resulted in hearings and proof was submitted at various dates between December 15, 1920 and April 7, 1921, and on July 6, 1921, the Commission filed a report declining to increase the division of the six complaining railroads operating in New England. A reargument was granted and on January 30, 1922, the Commission rendered a further report and order granting to the six principal complainants other than the Bangor & Aroostook Railroad, an increase of their divisions of substantially fifteen per cent (15%). It appears that prior to the passage of the Transportation Act of 1920, increases in freight rates were granted to carriers of the country as a whole and are referred to as the five per cent (5%) increase, fifteen per cent (15%) increase and the twenty-five per cent (25%) increase. Upon the passage of the Transportation Act, a proceeding before the Commission, which was known as "Ex parte 74," was instituted under which the Commission, pursuant to the provisions of the Transportation Act, established a rate for the eastern group of railroads comprising all those railroads between the Canadian border on the north, the Virginia gateway on the south, the Mississippi River on the west and the Atlantic coastline on the east, and these included the New England lines. In such Eastern Rate Group there was an authorized increase in
369 freight rates to the extent of forty per cent (40%) and upon the passenger rates of twenty per cent (20%). The New England railroads, making claim to a need for additional revenue because of certain conditions hereinafter referred to, applied for a division which resulted in the order here sought to be modified. Complaint of the New England lines, for increased divisions, was based upon the following claims:

(First.) That the cost of operation on the New England roads had been relatively very largely increased because of their terminal characteristics; that the New England Lines had a very high relative density of branch lines, stations, switch yards, junctions and a relatively short haul; that the cost of performing service in New England, because of its terminal characteristics and short haul, had relatively increased, while the cost of performing the service of the petitioners, owing to the improvements in heavy loadings, increased motive power and other factors pertaining to the long haul, had relatively decreased; that the New England Lines had a relatively low density of traffic, producing practically only one-third of the number of revenue ton miles per mile of road produced by the lines west of the Hudson River; that the proportion of freight revenue to passenger revenue was much less on the New England Lines than on the lines west of the Hudson River, and that the percentage of increased rates granted by the Commission, namely, 40% on freight and 20% on passenger traffic, supplied relatively a very much larger amount of revenue to the lines west than it did to the New
370 England Lines;

(Second.) That the standardization of railroad wages brought about during the period of Federal control and by the orders of the Labor Board had tremendously increased the cost of labor to the New England Lines and had relatively increased it very much more than it had increased the cost of labor to the lines west of the Hudson River, both because of the fact that the level of wages generally through New England had before the standardization been lower than the level of wages west of the Hudson, and because, owing to the terminal characteristics of the New England Lines, a given expenditure of man power produced relatively a smaller amount of revenue ton miles in transportation;

(Third.) That there had been a much greater relative increase in the cost of fuel needed for the production of power on the New England lines than upon the lines west of the Hudson, due not only to the distance of the New England lines from the coal mines, which prevented them from obtaining their supplies on such favorable terms, but due also to the fact that every increase of freight rates had increased the cost of bringing coal into New England which increase operated to the benefit of the lines west of the Hudson River and had been paid by the New England lines;

(Fourth.) The establishment of the so-called per diem system of charging for car hire had, owing to the poorly balanced traffic of the New England lines, which for every five loaded cars received
371 sent out only two loaded cars, imposed a heavy permanent burden on the New England lines since the establishment of the divisions.

Upon the hearings before the Interstate Commerce Commission, evidence was offered to support the claims advanced by the petitioning New England lines. Such testimony is in considerable volume and was given in considerable detail. It established that the joint rates in New England were established in the early Seventy's and most of the New England roads divisions dated back more than thirty-two years ago, and in spite of the changes in the railroad situation, the basis of these divisions has remained practically unchanged. The divisions were based entirely on the trade with mileage, actual or constructive, as the basis. By this long practice of divisions, the parties may be presumed to have considered that it was fair when established. (Youngstown Ship & Tube Co. v. P. & L. E. Ry., 29 I. C. C. 437; Chicago Switching Charges, 28 I. C. C. 679.)

The revenue requirements for the New England roads were proved and considered in considerable detail. The value of the property investment, the fixed charges of the railroads, the resulting deficits and profits during a period of years, were all submitted to the Commission, as were the accounts of the Boston & Maine, the Central Vermont and the Rutland Railroads. There was evidence of the revenue and property investment per unit of traffic and
372 the net operating income of the New England railroads. There was testimony offered as to the terminal characteristics, the operating handicaps and the diversity of routes and diffusion of

traffic in the New England territory. Such matters as the freight station density, the junction density and the branch line and the yard density and the character of the traffic, were all considered in the evidence offered. There was sufficient offered to support an argument of a poorly balanced traffic and the showing was made that the traffic of the New England roads is spread over a multitude of low density secondary and branch lines resulting in a relatively short haul. There was also evidence as to the amount of snow fall and the winter conditions which handicapped railroading. The requirements and cost of fuel, together with the wage problem was considered in considerable detail. We do not deem it necessary to the disposition we shall make of this case to narrate in this opinion, the detail of proofs as to each of these various considerations.

A tabulation was submitted showing the alleged claim of the inadequacy of the present divisions as compared with local and New England interline rates and as compared with the cost of service. There were given the percentages which the divisions of the joint rates consisted of, local rates, east and west of the New England junctions, and the relations of the divisions to the mileage prorate east and west. The inadequacy of the present divisions as indicated by their relation to local rates or mileage pro-rate when considered in connection with the length of the haul and character of the service, is thus demonstrated. These tabulations of the several petitioning New England roads were shown. The Commission's
373 report accompanying its order, said:

"Complainants perform their part of the interchange service under less favorable conditions than their connections west of the Hudson River. They are terminal lines; their hauls are short; their traffic splits at different junction points and is diffused over many secondary and branch lines; their trainloads are necessarily relatively light; the density of their freight traffic is relatively low; and while their investment per mile of road is low, their investment per revenue ton-mile is relatively high. Moreover, no coal mines are located on their rails, and fuel and many other supplies must be brought from considerable distances."

It was determined that these unfavorable conditions had existed long; that there had been a disproportionate increase in the burden upon the New England lines as compared with their connections during the preceding three years due to the disproportionate increase in the cost of fuel and to the disproportionate effect in the labor cost per ton-mile resulting from the heavy increases in wages. It held that the divisions in question had existed for many years without complaint until the extraordinary changes in the preceding three years, and that it was a reasonable assumption that such divisions had, until those changes, produced on the whole results which were fair. It examined the evidence relative to the reasonableness of the divisions prior to the extraordinary changes of the past three
374 years and held that there was nothing in the evidence tending to overthrow the presumption that, prior to such extra-

ordinary changes, the divisions produced fair results and were not unduly favorable on the whole to the New England carriers. It held that these extraordinary changes led inevitably to the conclusion that the New England roads were not fairly and equitably dealt with in the division with the Western connections. It held that the financial needs of the New England lines were not ascribable to the low level of the local freight or passenger rates. It pointed out that when it made the joint increase in rates in Ex parte 74, it appeared that the New England lines required an increase of 47.5% while the other carriers in the Eastern Group required but 28%, whereas in fact the increase substantially authorized an average of about 37% throughout the Eastern Group, and that under such circumstances, it would not have been unfair to provide that one-half of the increase on merchandise interchange traffic moving between New England and the rest of the country should accrue to the New England lines because of their greater needs. It concluded that a fair result could be accomplished by increasing the divisions of the New England carriers to the extent of 15% (subject to a limitation set forth in the order for the protection of the carriers west of the Hudson, where the New England lines received more than 50% of the total rate) and therefore found that the divisions in question should be increased accordingly.

375 Section 418 of the Transportation Act (41 Stat. 484-486) provides for divisions of rates.*

The petitioners attack the order of the Commission on the grounds that the Commission exceeded its authority in fixing primary divisions east and west of the Hudson River gateway without at the same time fixing the sub-division to be received by it of the two or

*Section 418. The first four paragraphs of section 15 of the interstate commerce act are hereby amended to read as follows:

* * * * * * *

(6) Whenever, after full hearing upon complaint or upon its own initiative, the commission is of opinion that the divisions of joint rates, fares, or charges, applicable to the transportation of passengers or property, are or will be unjust, unreasonable, inequitable, or unduly preferential or prejudicial as between the carriers parties thereto (whether agreed upon by such carriers, or any of them, or otherwise established), the commission shall by order prescribe the just, reasonable, and equitable divisions thereof to be received by the several carriers, and in cases where the joint rate, fare, or charge was established pursuant to a finding or order of the commission and the divisions thereof are found by it to have been unjust, unreasonable, or inequitable, or unduly preferential or prejudicial, the commission may also by order determine what (for the period subsequent to the filing of the complaint or petition or the making of the order of investigation) would have been the just, reasonable, and equitable divisions thereof to be received by the several carriers and require adjustment to be made in accordance therewith. In so prescribing and determining the divisions of joint rates, fares, and charges, the commission shall give due consideration, among other things, to the efficiency with which the carriers concerned are operated, the amount of revenue required to pay their respective operating expenses, taxes, and a fair return on their railway property held for and used in the service of transportation, and the importance to the public of the transportation services of such carriers; and also whether any particular participating carrier is an originating, intermediate, or delivering line, and any other fact or circumstances which would ordinarily, without regard to the mileage haul, entitle one carrier to a greater or less proportion than another carrier of the joint rate, fare, or charge.

more railroads participating in the haul on either side of the gateway and that the Commission exceeded its authority in the group treatment of divisions. That is, it is claimed that it should not have been given the broad consideration of the conditions east and west of the gateway but instead a consideration of each route independent of other routes. It is stated that the particular divisions found by the Commission are therefore unjust, unreasonable, inequitable and unduly preferential and prejudicial as among the respective
376 parties thereto. Also that the order is invalid because it was made in contemplation of further revision of divisions and that the order is invalid because it is based upon an imperfect structure of divisions. The attack is generally made that there was no a bona fide exercise of the Commission's power to fix divisions but an attempt to transfer money to the New England roads without statutory authority and that therefore the constitutional rights of the petitioners have been invaded.

The law is well settle that the courts will not set aside an order of the Commission in a proceeding such as this unless it is in violation of the Constitution or does not conform to the statutory authority of the Commission or is not supported by evidence. The courts will not review the wisdom or expediency of the Commission's order and they will not substitute their judgment for that of the Commission, even though it might be said that an opposite finding could be supported by the evidence.

377 In Seaboard Air Line Ry. Co. vs. United States (254 U. S. 57, 62) the Supreme Court said:

"Moreover the determination of questions of fact is by law imposed upon the Commission, a body created by statute for the consideration of this and like matters. The findings of fact by the Commission upon such questions can be disturbed by judicial decree only in cases where their action is arbitrary or transcends the legitimate bounds of their authority." (Citing Interstate Commerce Commission v. Louisville & Nashville R. R. Co., 227 U. S. 88; Pre-Cooling Case, 232 U. S. 199; Los Angeles Switching Case, 234 U. S. 294; Pennsylvania Company vs. United States, 236 U. S. 351.)

It is contended that §15 (6) in effect prevents the Commission in dealing with divisions of joint rates or through traffic at a dividing line such as the Hudson River unless at the same time it examines all the various sub-divisions of those joint rates at both sides of that line. It is claimed that because of this action on the part of the Commission, its order is in violation of the statute and this, because it did not examine all the subdivisions accruing out of the divisions west of the Hudson River to the vast number of different links in various routes west of that river. The discretion which is accorded to the Commission to make these examinations and findings is such that the court will not interfere with the results reached by the Commission unless it is made to appear that the discretion has been abused or that it amounts to arbitrary action, a conclusion which we cannot reach upon this record.

945

378 The practical necessities of the situation have resulted in transcontinental rates and from points in the west to the eastern seaboard being primarily divided at natural points located between the connecting lines. There is nothing contained in §15 (6) which prohibits the Commission from dealing with the matter of divisions in a practical way and nothing which makes it mandatory upon the Commission at the same time to take up an unworkable task in thus dealing with all of the sub-divisions about which there may be no complaint whatever. This record has made it plain that the New England Group, so-called, presents a transportation situation in a district clearly separable from other districts by a variety of controlling conditions. The Commission had the power to deal broadly with the question of primary divisions at the Hudson River on through traffic between New England points and the rest of the country. Section 15 (6) authorizes the Commission to take up and deal with the question of this primary division at the Hudson River and does not compel the Commission at the same time to deal with all subdivisions. It was found in the past to be a reasonable and helpful practice on the part of carriers as well as on the part of the Commission to deal with divisions of through rates from one well-defined district of the country to another on the basis of the primary division at the gateway between the two districts. It is the practical way to deal with the situation in view of the various number of different routes. (Pitts. & W. Va. R. vs. Pitts. & L. E. Ry., 61 I. C. C. 272; N. J. P. R. & T. Co. vs. C. R. R. of N. J., 63 I. C. C. 80.)

379 We think that §15 (6) in effect does not require the Commission to make an independent conclusion as to each carrier and as to the division of each joint rate. If it considers together the various carriers and various divisions and reaches a conclusion equally applicable to such carriers and divisions, its order is valid and enfore-able under the Act. That this procedure and practice was followed before the Transportation Act of 1920, see The Eastern Case (20 I. C. C. 275); the Western Case (20 I. C. V. 324); Railway Comm. of Texas vs. A. T. & S. F. Ry. (20 I. C. C. 468). Under §15, Congress directed the Commission to deal with the rate problems in a general way In Railway Commission of Wisconsin vs. Chicago, Burlington & Quincy Ry. Co., decided February 27, 1922, Chief Justice Taft said:

"The new measure imposed an affirmative duty on the Interstate Commerce Commission to fix rates and to take other important steps to maintain an adequate railway service for the people of the United States. This is expressly declared in section 15*a* to be one of the purposes of the bill. * * * The mandatory provision of section 15*a* that the commission "shall" initiate rates so that carriers, as a whole, (or as a whole in rate groups designated by the commission) will earn an aggregate income equal as nearly as may be to a fair return upon the aggregate value of railway property is a highly striking illustration of the new spirit."

Undoubtedly the Commission has a wide discretion to determine when the evidence before it is sufficiently typical and when the surrounding conditions justify a broad and comprehensive treat-
380 ment in the matter of divisions of rate as well as rate making. We find nothing in the record before the Commission in this case to justify any claim of an abuse of that discretion and the record does disclose that sufficient reasons were advanced of a nature compelling to the Commission why it should deal with the subject in a comprehensive manner such as it did deal with it and there is nothing to indicate that any conclusion substantially different in its broad outlines could have been arrived at by additional detail and study. The record shows that for three years preceding the order there had been a heavy and far reaching increase in railroad operating expenses throughout the country. On account of this increase, the Commission in Ex parte 74, made an increase in rates throughout the Eastern District amounting in actual practice to about 37%. It was found that in this proceeding that this heavy increase in the operating cost had been proportionately greater in New England than in the rest of the Eastern District, and for this proportionate increase the order in question is made.

The question before the Commission was the apportionment of the joint fund in proportion to the services rendered. In the past, the joint railroad service was largely measured by mileage performed by the participating carriers. This was then the way of expressing the relative burden incurred. It became apparent that other things measure the burden besides mileage and it was this increasing appreciation of these factors that led to the provisions of §15, sub. div. 6, indicating that mileage alone was not to be considered. That the Commission has given consideration to these other factors of
381 operation is explained in its report. The public interest is the leading characteristic of the Transportation Act. As said by the Supreme Court in The Wisconsin Case, "a new departure," imposing "an affirmative duty on the Interstate Commerce Commission to fix rates to take other important steps to maintain an adequate railway service for the people of the United States." The act makes it the Commission's duty to find a way, despite the complexity of the subject, to carry out the new mandate of Congress and makes it clear that the matter must be dealt with in a comprehensive way.

Nor may just complaint be lodged against this order because it is temporary and provisional and represents a transfer of revenue pending the Commission's reaching a conclusion on the subject of divisions. The Commission in the report made clearly indicates its willingness and desire to correct such injustice as might be found to arise in detail in connection with the comprehensive manner in which the Commission decided it ought to deal with the subject. This procedure was approved by the Supreme Court in the Wisconsin Case.

"The report and findings of the commission undoubtedly show that the intrastate fares work an undue discrimination against travelers in interstate commerce and against localities (Houston, E. &

W. T. R. Co. v. United States, 231 U. S. 342, 58 L. ed. 1341, 34 Sup. Ct. Rep. 833) in typical instances numerous enough to justify a general finding against a large class of fares. In a general order thus supported, possible injustice can be avoided by a saving clause allowing anyone to except himself from the order by proper showing. This practice is fully sustained by precedent in what was done as a sequence of the Shreveport Case (Houston, E. & W. T. R. Co. v. United States, supra) sec. 34, Inters. Com. Rep. 472; 41 Inters. Com. Rep. 83; Eastern Texas R. Co. v. Railroad Commission, P. U. R. 1917 F, 554, 242 Fed. 300; Looney v. Eastern
382 Texas R. Co., 247 U. S. 214, 62 L. ed. 1084, 38 Sup. Ct. Rep. 460. In Illinois C. R. Co. v. Public Utilities Commission, 245 U. S. 493, 508, 62 L. ed. 425, 437, P. U. R. 1918 C, 1279, 38 Sup. Ct. Rep. 170, this court indicated its approval of such practice, which was adopted by the commission. Business Men's League v. Atchison, T. & S. F. R. Co., 49 Inters. Com. Rep. 713. Any rule which would require specific proof of discrimination as to each fare or rate and its effect would completely block the remedial purpose of the statute."

We are satisfied that a reasonable investigation was made by the Commission finding that the existing divisions accruing to the New England lines were unjust, unreasonable and inequitable, and it was warranted in making its temporary order.

An exhaustive review of the circumstances and situations which will make intelligent progress in the future determination of rates and the division of same is now in progress by the Interstate Commerce Commission under the Transportation Act of 1920. As was said in Interstate Commerce Commission vs. Chicago R. I. & Pac. Ry. (218 U. S. 88, 102), it is the only body authorized to make such a review.

"From whatever standpoint the powers of the Interstate Commerce Commission may be viewed, they touch many interests, they may have great consequences. They are expected to be exercised in the coldest neutrality. The commission was instituted to prevent discrimination between persons and places. It would indeed be an abuse of its powers to exercise them so as to cause either. And the training that is required, the comprehensive knowledge which is possessed, guards or tends to guard against the accidental abuse of its powers, or, if such abuse occur, to correct it. The possession of such advantages is one of its defenses.

* * * * * * *

As we have said, the commission is the tribunal that is intrusted with the execution of the interstate commerce laws, and has been given very comprehensive powers in the investigation of and determination of the proportion which the rates charged shall
383 bear to the service rendered, and this power exists, whether the system of rates be old or new. * * * In that inquiry many elements may enter upon which the judgment of the

commission shall first pass, and of which the courts should not be called upon in advance to intimate an opinion. The reasons for this we have indicated, and they will be found at length in the cases which we have cited."

We are satisfied that a reasonable investigation has been made which warranted the granting of the temporary order which is now complained of, and no valid reasons exist why this court should invalidate or modify this order. The application for an injunction is denied.

CHAS. M. HOUGH.
MARTIN T. MANTON.
JULIUS M. MAYER.

384 16. *Decree.*

In the United States District Court, Southern District of New York.

In Equity.

No. E. 23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

UNITED STATES OF AMERICA, Respondent; INTERSTATE COMMERCE Commission, Intervening Respondent, and The Boston & Maine Railroad Company et al., Intervening Respondents.

Before the Honorable Charles M. Hough, the Honorable Martin T. Manton, and the Honorable Julius M. Mayer, United States Circuit Judges, Sitting in the District Court in Pursuance of the Act of October 22, 1913 (38 Stat., 220).

Interlocutory Decree.

This cause came on to be heard at this Term, and was argued by counsel; and thereupon, upon consideration thereof, it was ordered, adjudged and decreed that the application for an interlocutory
385 injunction restraining the enforcement of the order of the Interstate Commerce Commission be and the same is hereby denied.

By the Court:

CHAS. M. HOUGH,
MARTIN T. MANTON,
JULIUS M. MAYER,
Circuit Judges.

June 3d, 1922.

Form approved.
WALTER C. NOYES,
Solicitor for Plaintiff.

R. D. M.

A true copy.

[Seal of District Court of the United States, Southern District of N. Y.]

ALEX. GILCHRIST, JR.,
Clerk.

386 17. *Petition for Appeal.*

In the District Court of the United States for the Southern District of New York.

In Equity.

23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Petition for Appeal.

The above named petitioners and intervening petitioners (being all those petitioners and intervening petitioners named in the petition as amended and intervening petition) considering themselves aggrieved by the interlocutory decree dated June 3, 1922 and entered on June 5, 1922, in the above entitled proceeding before the Honorable Charles M. Hough, the Honorable Martin T. Manton and the Honorable Julius M. Mayer, United States Circuit Judges, sitting in this Court in pursuance of the Act of October 22, 1913, denying, after notice and hearing, the application of said petitioners and intervening petitioners for an interlocutory injunction suspend-
387 ing, restraining the enforcement, operation and execution of, and setting aside in whole and in part an amended order of the Interstate Commerce Commission made on March 28th, 1922 in a certain proceeding wherein Bangor and Aroostook Railroad Company and others were complainants and Aberdeen and Rockfish Railroad Company and others were defendants, pray that an appeal may be allowed them to the Supreme Court of the United States from said interlocutory decree and order of this Court denying said application

for a preliminary injunction for the reasons specified in the assignment of errors filed herewith and that a transcript of the record, proceedings and papers on which said order denying interlocutory injunction was made and entered, duly authenticated, may be transmitted forthwith to the Supreme Court of the United States.

WALTER C. NOYES,
R. W. BARRETT,
JOHN C. BILLS,
GEORGE F. BROWNELL,
CLYDE BROWN,
N. S. BROWN,
A. H. ELDER,
W. S. JENNEY,
H. T. NEWCOMB,
CHARLES C. PAULDING,
Solicitors for Petitioners.

June 9, 1922.

A true copy.

[Seal of District Court of the United States, Southern District of N. Y.]

ALEX. GILCHRIST, JR.,
Clerk.

388 18. *Bond on Appeal.*

In the District Court of the United States for the Southern District of New York.

E. 23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Bond on Appeal.

Know all men by these presents, That we, The Delaware and Hudson Company, a corporation of the State of New York, one of the petitioners in the above entitled cause, as principal, and The Fidelity and Casualty Company of New York, also a corporation of the State of New York, as surety, are held and firmly bound unto The United States of America in the sum of Five Hundred Dollars ($500.00) to be paid to The United States of America, for the payment of which

well and truly to be made we bind ourselves and each of us
389 jointly and severally firmly by these presents.

Sealed with our seals and dated the 8th day of June in the year One thousand nine hundred and twenty-two.

Whereas, the above named petitioners and intervening petitioners are prosecuting an appeal to the Supreme Court of the United States to reverse an interlocutory decree entered in the above entitled cause on the 5th day of June, 1922, denying their application for an interlocutory injunction to restrain the enforcement of an order of the Interstate Commerce Commission and the said petitioners, and intervening petitioners, having obtained an appeal from said decree to the Supreme Court of the United States to reverse the decree in the aforesaid suit.

Now the condition of the above obligation is such that if the said petitioners and intervening petitioners shall prosecute their appeal to effect and shall answer all damages and costs if they fail to make their plea good, then the above obligation to be void, otherwise to remain in full force and virtue.

[SEAL.] THE DELAWARE AND HUDSON COMPANY,
By W. H. WILLIAMS,
Vice-President.

Sealed and delivered in presence of:

——— ———.

F. M. OLYPHANT,
Secretary.

390 THE FIDELITY AND CASUALTY COMPANY OF NEW YORK,
By EDWARD C. LUNT, [SEAL.]
Vice-President.

Approved:

C. M. HOUGH,
MARTIN T. MANTON,
JULIUS M. MAYER,
United States Circuit Judges, Sitting in the District Court in Pursuance of the Act of October 22, 1913.

391 *Financial Statement.*

The Fidelity and Casualty Company of New York.

December 31, 1921.

Assets.

Stocks and Bonds	$19,874,146.46
Real Estate	1,277,595.72
Cash in Banks and Office	962,898.89
Gross Premiums in course of collection (not overdue)	3,262,804.83
All other Assets	694,731.54
	$26,072,177.44

Liabilities.

Reserve for Unearned Premiums	$8,892,237.59
Reserve for Unpaid Losses	8,696,464.89
Commission on Premiums in course of collection	791,305.34
All other Liabilities	703,692.93
Capital Stock $2,000,000.00 \ Surplus to Net Surplus 4,988,476.69 / Policy Holders	6,988,476.69
	$26,072,177.44

At the regular meeting of the board of directors of The Fidelity and Casualty Company of New York, held at its office in the City of New York on the 20th day of July, 1921, a quorum being present, the following resolution was unanimously adopted:

"Resolved, That each of the following persons to wit: Robert J. Hillas, president of the company; Theodore E. Gaty, vice-president-secretary of the company; Edward C. Lunt, a vice-president of the company; George W. Allen, Charles L. Newmiller, Walter McK. Hillas, and Hale Anderson, each an assistant secretary of the company; Chester E. Bates, William Le Roy Bates, Paul Berghaus, W. J. Clark Branion, Charles J. Bosworth, Louis B. Caziare, Channing B. Cornell, Clifford M. Crane, William E. Dickey, Martha M. Divine, Wade Fetzer, George E. Friend, Thomas H. Gignilliat, William P. Harvey, James R. Hillas, James H. Hughes, Gustav W. Lürman, 3rd, William L. Macalister, John R. McKinney, Henry G. Morgan, George A. Peterson, Dunbar P. Spotts, Sara V. Stanton, George W. Varian, Daniel W. Wall, D. Macon Webster, and Walter L. Wilder, each as an attorney, is hereby authorized to execute on behalf of The Fidelity and Casualty Company of New York bonds, undertakings, and contracts of suretyship; and to attest the corporate seal of the company to any and all bonds, undertakings, and contracts of suretyship signed by any of the said persons; provided—

"1. That the authority herein granted to Chester E. Bates, Paul Berghaus, Louis B. Caziare, Clifford M. Crane, William E. Dickey, Wade Fetzer, George E. Friend, William P. Harvey, James H. Hughes, William L. Macalister, George A. Petersen, Dunbar P. Spotts, and Walter L. Wilder, shall be limited to bonds, undertakings, and contracts of suretyship of not more than one hundred thousand dollars, unless the said bonds, undertakings, or contracts of suretyship shall also be signed by the president, or the vice-president-secretary, or the vice-president named above, or one of the assistant secretaries.

"2. That the authority herein granted to William Le Roy Bates, W. J. Clark Branion, Martha M. Divine, Thomas H. Gignilliat, James R. Hillas, Gustav W. Lürman, 3rd, Henry G. Morgan, Sara V. Stanton, and D. Macon Webster shall be limited to bonds, undertakings, or contracts of suretyship of not more than twenty-five thousand dollars, unless the said bonds, undertakings, or contracts of suretyship shall also be signed by the president, or the vice-president-secretary, or the vice-president named above, or one of the assistant secretaries.

"3. Resolved, further, That the appointment of each of the persons named herein to his respective office or position is hereby confirmed."

STATE OF NEW YORK,
County of New York,
City of New York, ss:

Edward C. Lunt, to me known being by me duly sworn, deposes and says that the affiant is a Vice President of The Fidelity and Casualty Company of New York, the corporation which is described in and which executed the annexed instrument; that the affiant knows the corporate seal of the said corporation; that the seal affixed to the annexed instrument is the corporate seal of The Fidelity and Casualty Company of New York, and was thereto affixed by order and authority of the board of directors of the said company; and that the affiant signed the affiant's name thereto by like order and authority as Vice President of the company. The affiant further deposes and says that the foregoing financial statement of The Fidelity and Casualty Company of New York, to the best of the affiant's knowledge and belief is a full, true, and correct statement of the financial condition of the said company on the 31st day of December 1921. The affiant deposes and says that the affiant has compared the foregoing resolution of the board of directors of the said company, with the original thereof, as recorded in the minute book of the said company, and does hereby certify that the same is a true and correct transcript therefrom, and of the whole of the said resolution, and the same is now in full force. EDWARD C. LUNT.

Subscribed and sworn to before me this 8th day of June, 1922.
GEO. W. VARCUM,
Notary Public, New York County.

392 [Endorsed:] Bond of The Fidelity and Casualty Company of New York, 92 Liberty Street, New York City. I approve the bond attached and the sufficiency of the Surety. —— ——. Dated —— —, ——. A true copy. Alex. Gilchrist, Jr., Clerk. Seal of the District Court of the United States, Southern District of N. Y.

393 19. *Assignments of Errors.*

In the District Court of the United States for the Southern District of New York.

E. 23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Assignment of Errors.

And now come the above named petitioners and intervening petitioners and in connection with their petition for appeal assign the following errors.

The District Court erred:

I.

In denying the application of the above named petitioners and intervening petitioners for an interlocutory injunction restrain-
394 ing the enforcement of the amended order of the Interstate Commerce Commission, dated March 28th, 1922, described in the supplemental petition.

II.

In holding that the above named petitioners and intervening petitioners are not entitled to relief in accordance with the prayers of the petition and supplemental petition.

III.

In holding that the Interstate Commerce Commission has authority to increase the revenues of one group of carriers at the expense of another group of carriers by increasing the divisions of joint rates of the one group and decreasing those of the other group, without giving consideration to the separate situation of each of the carriers in each group.

IV.

In refusing to hold that said amended order is invalid because it deals with groups of carriers as such, and not separately with the carriers respectively entitled to share in the joint rates.

V.

In refusing to hold that said amended order is invalid because it is based upon an arbitrary treatment of five railroads as "the New England Group" although the statute does not warrant such a grouping of carriers in the fixing of divisions.

VI.

In refusing to hold that such amended order is invalid be-
395 cause based wholly upon group statistics which are incompetent and irrelevant in determining equitable and just divisions as between the several carriers interested.

VII.

In refusing to hold that said amended order is invalid because it does not prescribe the divisions to be received by the several participating carriers.

VIII.

In holding that the amended order prescribes primary divisions of joint rates.

IX.

In holding that the Interstate Commerce Act authorizes the Interstate Commerce Commission to fix primary divisions of joint rates without fixing the divisions of the several participating carriers.

X.

In refusing to hold that said amended order is invalid because it is a temporary and provisional order and leaves the adjustment of the divisions of joint rates according to the statute for future determination.

XI.

In holding that just complaint may not be "lodged against this order because it is temporary and provisional and represents a transfer of revenue pending the Commission reaching a conclusion on the subject of division".

396

XII.

In holding that said amended order as affecting many of the petitioners and intervening petitioners and other railroad companies

which were parties defendant in the proceeding before the Interstate Commerce Commission is valid notwithstanding there was no evidence before the Commission as to the existing divisions of joint rates to which said companies were parties.

XIII.

In holding that there was "typical evidence" before the Interstate Commerce Commission in said proceeding to justify said amended order as against the petitioners and intervening petitioners.

XIV.

In refusing to hold that said amended order is invalid because it is arbitrary.

XV.

In refusing to hold that said amended order is invalid because notwithstanding the widely varying and special circumstances affecting the several carriers defendant it deals with their divisions in a horizontal and general way.

XVI.

In holding that the statutory power of the Interstate Commerce Commission over the division of joint rates is the same or similar to the power of the Commission to prescribe general increases or reductions in rates.

XVII.

In refusing to hold that said amended order is invalid because the Interstate Commerce Commission did not find that the
397 divisions which it attempted to supersede were or would become unreasonable.

XVIII.

In holding that the Interstate Commerce Commission in making said amended order acted within any grant of power contained in the Interstate Commerce Act or in any other Act of Congress.

XIX.

In refusing to hold that said amended order is invalid because it does not adhere to the standards prescribed by the Interstate Commerce Act.

XX.

In refusing to hold that the original order of the Commission in the matter in question was invalid for the reasons above specified as to said amended order.

XXI.

In holding that either or both said original order and amended order were or are valid and lawful orders.

XXII.

In holding that the enforcement of the said amended order will not take the property of petitioners without due process of law and for public use without just compensation in violation of the Fifth Amendment.

XXIII.

In holding that Congress has power to delegate to the Interstate Commerce Commission the authority attempted to be exercised in said amended order.

398 Wherefore, the above named petitioners and intervening petitioners and each of them pray that said order of said Court denying their application for an interlocutory injunction be reversed and set aside with directions that such application be granted and for such other and further relief as may be appropriate.

WALTER C. NOYES,
R. W. BARRETT,
JOHN C. BILLS,
GEORGE F. BROWNELL,
CLYDE BROWN,
N. S. BROWN,
A. H. ELDER,
W. S. JENNEY,
H. T. NEWCOMB,
CHARLES C. PAULDING,
Solicitors for Petitioners.

A True Copy.

[Seal of District Court of the United States, Southern District of N. Y.]

ALEX. GILCHRIST, JR.,
Clerk.

399 20. *Order Allowing Appeal.*

In the District Court of the United States for the Southern District of New York.

In Equity.

No. E. 23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Order Allowing Appeal.

In the above entitled cause the petitioners and intervening petitioners having made and filed their petition praying an appeal to the Supreme Court of the United States from the interlocutory decree of this Court dated June 3, 1922 and entered June 5, 1922, denying their application for an interlocutory injunction restraining the enforcement of an order of the Interstate Commerce Commission and having made and filed an assignment of errors and having conformed in all respects to the statutes and rules of court in such case made and provided, it is

400 Ordered and decreed that the appeal prayed for be and it is hereby allowed and made returnable on the seventh day of July, 1922, and the Clerk is directed to transmit forth-with a properly authenticated transcript of the record, papers and proceedings to the Supreme Court of the United States.

C. M. HOUGH,
MARTIN T. MANTON,
JULIUS M. MAYER,
United States Circuit Judges, Sitting in the District Court in Pursuance of the Act of October 22, 1913.

June 9, 1922.

A True Copy.

[Seal of District Court of the United States, Southern District of N. Y.]

ALEX. GILCHRIST, JR.,
Clerk.

401 21. *Citation.*

In the District Court of the United States for the Southern District of New York.

In Equity.

E. 23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY, Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

UNITED STATES OF AMERICA, *ss:*

To the United States of America, The Interstate Commerce Commission, Boston & Maine Railroad, Bridgeton & Saco River Railroad Company, Central New England Railway Company, Central Vermont Railway Company, Maine Central Railroad Company, Montpelier & Wells River Railroad, Rutland Railroad Company, Sandy River & Rangeley Lakes Railroad, St. Johnsbury & Lake Champlain Railroad Company and New York, New Haven and Hartford Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States at Washington within
402 thirty days from the date hereof pursuant to an appeal duly allowed and filed in the Clerk's office of the District Court of the United States, for the Southern District of New York, wherein the above named petitioner and intervening petitioners are appellants and you are appellees, to show cause, if any there be, why the interlocutory decree rendered against said appellants in said appeal should not be reversed and set aside and an order or decree of the United States Supreme Court should not be made granting to the appellants the relief prayed for and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Charles M. Hough, Circuit Judge, the Honorable Martin T. Manton, Circuit Judge, the Honorable Julius M. Mayer, Circuit Judge, sitting in the District Court in pursuance of the Act of October 22, 1913. Dated, this 9th day of June, 1922.

CHARLES M. HOUGH,
United States Circuit Judge.
MARTIN T. MANTON,
United States Circuit Judge.
JULIUS M. MAYER,
United States Circuit Judge.

403 23. *Præcipe.*

District Court of the United States, Southern District of New York.

In Equity.

23-226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERSTATE Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Præcipe for Record.

The Clerk of this Court is hereby requested and directed to prepare and certify a transcript of the record in the above entitled case for the use of the Supreme Court of the United States by including therein the following:

1. Petition with exhibits attached thereto.

2. Order to show cause.

3. Application for leave to file supplemental petition and order granting same.

4. Supplemental Petition and exhibit attached thereto, being the Amended Order of the Interstate Commerce Commission.

5. Petition of Intervention of Ann Arbor Railroad Company et al.

404 6. Petition of Intervention of the Interstate Commerce Commission.

7. Petition of Intervention of the Boston & Maine Railroad et al.

8. Orders granting petitions of intervention.

9. Answer of the United States.

10. Answer of the Interstate Commerce Commission.

11. Answer of the Boston & Maine Railroad et al.

12. Minutes of proceedings of April 22, 1922 before the United States District Court, except the arguments.

13. Affidavits received in evidence upon the hearing before the United States District Court, viz:

(*a*) of Charles L. Ewing.

(*b*) of Dick T. Lawrence.

(*c*) of Henry Adams.

(*d*) of Harry S. Bradley.

(*e*) of William G. Storey.

14. Petitioner's ExhibitA received in evidence upon hearing before United States District Court.

15. Opinion of the Court, by Judge Manton.

16. Interlocutory decree.

17. Petition for appeal.

18. Bond on appeal.

19. Assignments of errors.

20. Order allowing appeal.

21. Citation.

22. Testimony before the Interstate Commerce Commission (except the exhibits), introduced in this Court, reduced to narrative form in accordance with the rule (This statement is lodged in the Clerk's office at the time of filing this præcipe).

405 & 406

23. Exhibits before the Interstate Commerce Commission introduced as evidence in this Court as follows: Exhibits 1 to 32 inclusive; Exhibit 33 to 39 inclusive; Exhibits 42 to 77 inclusive; Exhibits 79 to 170 inclusive; Exhibts 172 to 207 inclusive; and including two Exhibits No. 1, Exhibit No. 2 Supplement, Exhibit No. 9-A, Exhibit No. 12-A, Exhibit No. 15 Corrected, Exhibit No. 61 Revised, Exhibit No. 62 Revised, Exhibit No. 128 Supplement, Exhibit No. 129 Supplement, and Exhibit No. 191-A.

24. Præcipe.

25. Last order enlarging time for docketing appeal and filing record.

Dated this 29th day of September, 1922.

WALTER C. NOYES,
H. T. NEWCOMB,
Of Solicitors for Appellants.

407 In the District Court of the United States for the Southern District of New York.

In Equity.

23–226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERstate Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Stipulation.

In order to avoid the great expense and delay of reproducing the exhibits offered in evidence in this case, the parties consent to the entry of an order in the form hereto attached and join in requesting the Court to enter the same. To expedite the matter separate stipulations will be signed by the parties but will be presented to the Court together.

WALKER D. HINES,
For the Interstate Commerce Commission.
BLACKBURN ESTERLINE,
Assistant to the Solicitor General for the United States.
CHAS. F. CHOATE, JR.,
JAMES GARFIELD,
For the Intervening Railroads, Defendants.

408 In the District Court of the United States for the Southern District of New York.

In Equity.

23–226.

THE AKRON, CANTON & YOUNGSTOWN RAILWAY COMPANY et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

against

THE UNITED STATES OF AMERICA, Respondent, and THE INTERstate Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

Order.

At the request of all the parties and for good cause shown, it is Ordered that the exhibits named in the Præcipe for record of the appellants, including Petitioner's Exhibit A offered separately upon

the hearing and the Interstate Commerce Commission exhibits, shall not be transcribed or reproduced for the purposes of the record on appeal but shall be transmitted to the Supreme Court in the form in which they were presented to this Court.

Dated Oct. 11, 1922.

MARTIN T. MANTON,
JULIUS M. MAYER,
Circuit Judges, Acting as District Judges in Pursuance of the Act of October 22, 1913.

409 *Stipulation on Appeal Record.*

United States District Court, Southern District of New York.

In Equity.

23–226.

THE AKRON, CANTON & YOUNGSTOWN RY. CO. et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

vs.

THE UNITED STATES OF AMERICA, Respondent, and THE INTERstate Commerce Commission and The Boston and Maine Railroad Company et al., Intervening Respondents.

It is hereby stipulated and agreed, that the foregoing is a true transcript of the record of the said District Court in the above-entitled matter as agreed on by the parties.

Dated October 11, 1922.

WALTER C. NOYES,
H. T. NEWCOMB,
Attorneys for the Petitioners.
BLACKBURN ESTERLINE,
Assistant to the Solicitor General,
(By WALKER D. HINES,)
Attorney for the United States.
WALKER D. HINES,
Attorney for the Interstate Commerce Commission.
CHARLES F. CHOATE, JR.,
JAMES GARFIELD,
By WINTHROP & STEVENSON,
Attorneys for the Intervening Railroad Companies, Respondents.

410 [Endorsed:] United States District Court, Southern District of New York. In Equity. 23-226. The Akron, Canton & Youngstown Railway Company, et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners, vs. The United State of America, Respondent, and The Interstate Commerce Commission et al., Interv. Resp'ts. Stipulation as to Correctness of Appeal Record.

411 UNITED STATES OF AMERICA,
Southern District of New York, ss:

In Equity.

23–226.

THE AKRON, CANTON & YOUNGSTOWN RY. CO. et al., Petitioners, and The Ann Arbor Railroad Company et al., Intervening Petitioners,

vs.

THE UNITED STATES OF AMERICA, Respondent, and THE INTERstate Commerce Commission and The Boston & Maine Railroad Company et al., Intervening Respondents.

I, Alexander Gilchrist, Jr., Clerk of the District Court of the United States of America for the Southern District of New York, do hereby Certify that the foregoing is a correct transcript of the record of the said District Court in the above-entitled matter as agreed on by the parties.

In testimony whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, this 11th day of October in the year of our Lord one thousand nine hundred and twenty-two and of the Independence of the said United States the one hundred and forty-seventh.

[Seal of the District Court of the United States, Southern District of N. Y.]

ALEX. GILCHRIST, JR.,
Clerk.

Endorsed on cover: File No. 29,196. S. New York D. C. U. S. Term No. 646. The Akron, Canton and Youngstown Railway Company, The Ann Arbor Railroad Company et al., appellants, vs. The United States of America, The Interstate Commerce Commission, Boston & Maine Railroad Company et al. Filed October 12th, 1922. File No. 29,196.